



ANNUAL INFORMATION FORM

Year Ended June 30, 2005

September 26, 2005

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BIONICHE LIFE SCIENCES INC.

INTRODUCTION

Vetrepharm Inc. was incorporated in May, 1979 under the *Business Corporations Act* (Ontario) (the OBCA). In February, 1992, it segregated its Animal Health and Human Health businesses with the amalgamation of two of its wholly-owned subsidiaries, Bioniche Inc. and Caneire (Canada) Inc. with Almark Capital Ltd. to form Bioniche Inc. Following the amalgamation, Vetrepharm Inc.'s Human Health business was carried on by Bioniche Inc., a publicly traded company and the Animal Health business was carried on through privately held subsidiaries.

In 1996, Vetrepharm Inc. transferred its animal health business to Vetrepharm Animal Health Inc., a wholly-owned subsidiary at the time. Vetrepharm Inc. amalgamated with its parent, Vetrepharm Investments Holdings Inc., pursuant to articles of amalgamation dated July 1, 1998 under the OBCA and on July 2, 1998, by articles of amendment, changed its name to Renaissance Life Sciences Inc.

On September 1, 1999, Renaissance Life Sciences Inc., Bioniche Inc. and Vetrepharm Animal Health Inc. amalgamated to form Bioniche Life Sciences Inc. pursuant to articles of arrangement issued under the Canada *Business Corporations Act*.

On July 1, 2002, the Company's animal health business changed its name from Vetrepharm to Bioniche Animal Health. Accordingly, Vetrepharm Canada Inc. changed its name to Bioniche Animal Health Canada Inc., Vetrepharm Research, Inc. changed its name to Bioniche Animal Health USA, Inc., Vetrepharm Teoranta changed its name to Bioniche Animal Health Europe Limited and Vetrepharm (A/Asia) Pty. Ltd. changed its name to Bioniche Animal Health (A/Asia) Pty. Ltd.

Bioniche Therapeutics Inc. was wound up on March 1, 2002 and all of its assets were transferred to Vetrepharm Research Inc., which subsequently changed its name to Bioniche Therapeutics Limited on July 1, 2002. This subsidiary now conducts all of the Company's research activities for both the Animal and Human Health businesses.

Following a thorough evaluation of the Company beginning in the fall of 2004, a decision was made to realign operations in order to enhance the corporate focus on key strategic priorities and to improve near-term financial performance. As a result of this evaluation, the Company has determined that it will dispose of its sterile injectibles business, Bioniche Pharma Group Limited. The Company currently owns 65.36 percent of that business on a fully-diluted basis. Accordingly, the activities relating to the Bioniche Pharma assets to be disposed of have been presented as discontinued operations in the Company's financial statements at June 30, 2005, and will be presented separately in this Annual Information Form.

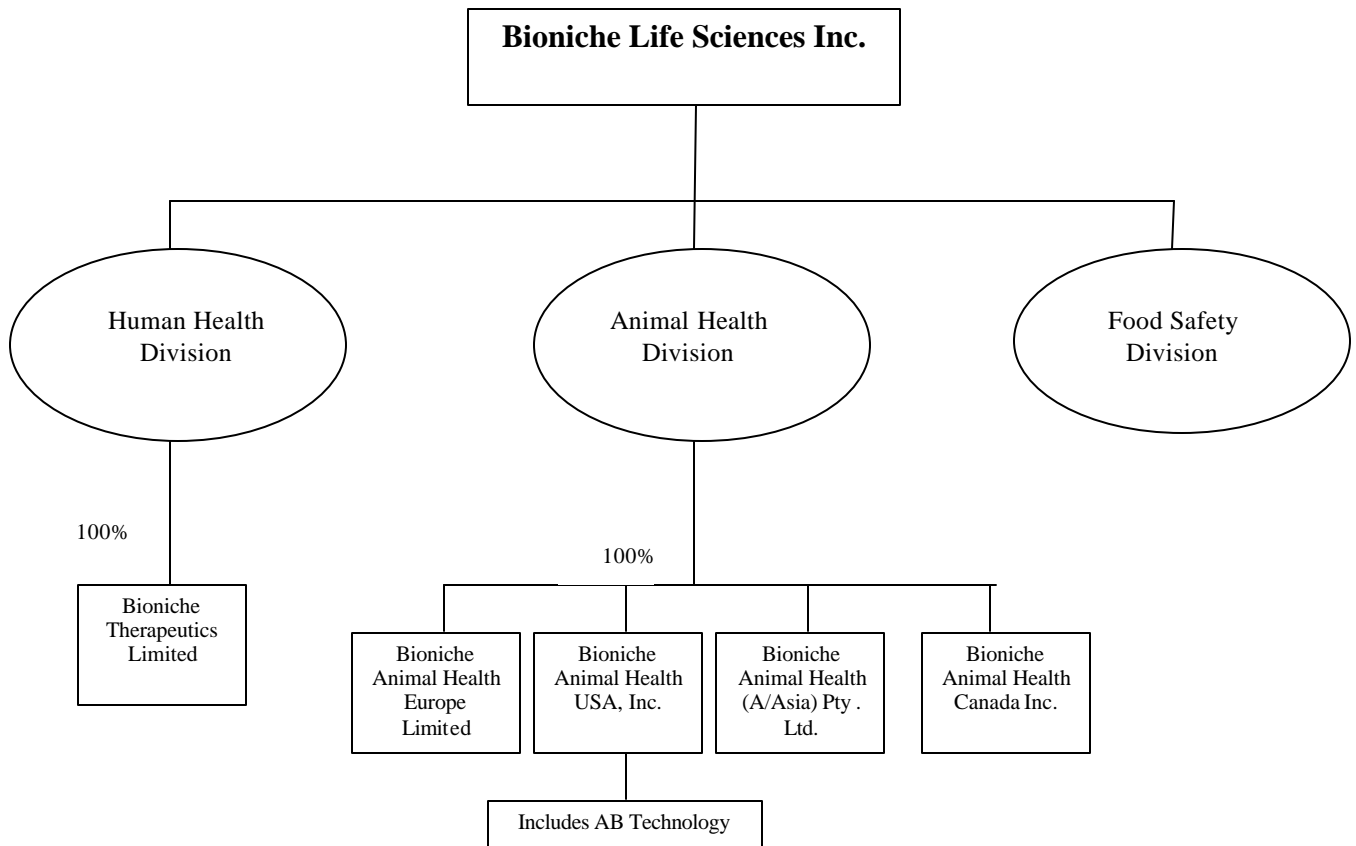
The Company's registered and principal office is located at 231 Dundas Street East, P.O. Box 1570, Belleville, Ontario.

In this Annual Information Form, unless the context otherwise requires, Bioniche Life Sciences Inc., along with all of its subsidiaries where the context requires, is referred to as "Bioniche" or "the Company".

The following is a list of the material direct and indirect subsidiaries of the Company as of June 30, 2005 (excluding Bioniche Pharma Group Limited):

Subsidiary	Jurisdiction of Incorporation	Percentage of Voting Securities Owned Directly or Indirectly by the Company	Percentage of Non-Voting Securities Owned Directly or Indirectly by the Company
Bioniche Animal Health USA, Inc.	United States	100%	N/A
Bioniche Animal Health (A/Asia) Pty. Ltd.	Australia	100%	N/A
Bioniche Animal Health Canada Inc.	Ontario	100%	N/A
Bioniche Animal Health Europe Limited	Ireland	100%	N/A
Bioniche Therapeutics Limited	Ontario	100%	N/A

The following chart depicts the shareholdings of the Company and its principal subsidiaries:



GENERAL DEVELOPMENT OF BIONICHE'S BUSINESS

OVERVIEW

Bioniche Life Sciences Inc. is a research-based, technology-driven Canadian biopharmaceutical company that develops, manufactures, and markets proprietary products for human and animal health markets worldwide. The Company is developing a pipeline of anti-cancer therapies based on its proprietary mycobacterial cell wall technologies.

The Company's animal health business was founded in 1979 by Graeme McRae, who believed that the major veterinary pharmaceutical companies were putting insufficient research efforts into alternatives to antibiotics as treatments for animal disease. Mr. McRae believed that there had to be more suitable ways of treating veterinary diseases that did not have the problems associated with antibiotics, such as residues in the food chain and the development of resistant bacterial species.

In 1992, the human application of the original technologies and an Irish sterile injectables manufacturing plant were licensed into a separate public company called Bioniche Inc. Effective September 1, 1999, all of these businesses were amalgamated under the name of Bioniche Life Sciences Inc.

The Company (excluding Bioniche Pharma Group Limited) employs approximately 175 people and has three principal reporting segments: Human Health, Animal Health and Food Safety.

Bioniche Therapeutics, the Human Health business unit, is the research division of the Company. It develops proprietary technologies for use in human medicine. The Company's primary strategy is to develop technologies through to early clinical stage development, then to establish strategic alliances for late stage clinical development, registration and marketing. This division is also responsible for the marketing of the Company's proprietary product, *Cystistat*®.

Bioniche Animal Health, the Animal Health business unit, is responsible for researching, developing, manufacturing and marketing veterinary biopharmaceutical products worldwide. Established in 1979 to develop technologies to replace antibiotics in livestock, management believes that the Company is now the largest Canadian-owned biopharmaceutical animal health company. Bioniche Animal Health has marketing subsidiaries in Canada, the United States, Australia and Europe and operates through distributors worldwide. Research for the animal health division is conducted through Bioniche Therapeutics Limited.

Bioniche Food Safety, the food safety business unit was established in July, 2001. It is responsible for researching, developing, manufacturing and marketing veterinary biopharmaceutical products to improve the safety of food and water supplies worldwide. The leading initiative for this division is the development and commercialization of a new cattle vaccine for the prevention of the spread of the deadly *E. coli* O157:H7 bacteria.

THREE YEAR HISTORY

Human Health

The Company's clinical development program for human health has progressed well over the past three years. The focus has been on the development of its proprietary Mycobacterial Cell Wall-DNA Complex (MCC) for the treatment of bladder cancer. Phase I/II studies were completed and presented to

the urology community in May and June of 2004, with a 72.7% complete response rate seen at 18 months post-treatment in patients who had previously failed the standard therapy (8 mg dose). Further data has been generated in this period to support a protocol for a proposed Phase III clinical trial in North America and Europe using MCC (trademarked *Urocidin*) in the treatment of patients with bladder cancer. Investigators at approximately 60 sites are being recruited. The Investigational New Drug (IND) submission is expected to be made to the U.S. Food and Drug Administration (FDA) before the end of calendar 2005. A similar submission will be made to the European Medicines Agency (EMA). Recruitment of patients for the study could begin early in 2006.

Over the past year, the Company has been actively pursuing partnership opportunities with other pharmaceutical companies in the bladder cancer field to help finance the clinical trial and assume responsibilities in marketing the product in Europe. This is in keeping with the Company's business strategy of developing proprietary technologies to late stage before commercializing and, in markets where it is less experienced, finding strategic partners to assist in getting the product to key customers.

The Company's manufacturing facility in Pointe-Claire, Québec has been modified for the production of the clinical trial material for this planned Phase III trial. The Company purchased the building in 2001 and has spent the last four years upgrading it to meet the production requirements for MCC. Several new systems were required, and these have been purchased and installed. Each piece of equipment was validated and tested to ensure that it met current Good Manufacturing Practice (cGMP) regulations.

At the same time as the equipment and systems were being qualified as part of the validation process, changes in formulation of MCC were being implemented. New synthetic growth media, method of breaking up cells, and innovative sterilization methods have been introduced. These innovations have reduced manufacturing time and produced higher yields. The first cGMP batch of MCC with all of these new elements was produced in June, 2004.

Further pre-clinical research has been conducted in this period utilizing MCC in the treatment of breast and ovarian cancer cell lines *in vivo*. Most recently, a study using MCC against peritoneal (colon) cancer in rats was presented at the 7th World Congress on Gastrointestinal Cancer in Barcelona, Spain. MCC had direct anticancer activity against PROb cells. The results of a Phase I study involving MCC combined with hyaluronan (hyaluronic acid-HA) in the treatment of prostate cancer were presented in March, 2004 at the 19th Annual Congress of the European Association of Urology in Vienna. Principal Investigator, Dr. Alvaro Morales, concluded that MCC/HA can be injected safely into the prostate, and that further evaluation of this treatment was warranted given the safety profile and histopathologic examination post-treatment.

Animal Health

The Company was originally formed with a mandate of finding technologies to replace antibiotics in the treatment of animal diseases. The proliferation of antibiotic-resistant bacteria due to excessive or inappropriate use of antibiotics is an increasingly serious issue. One example of the Company's success in this area has been the launch, in December, 2004, of a new U.S. product - *Settle*TM - a mycobacterial cell wall product for the treatment of equine endometritis caused by *Streptococcus zooepidemicus*. Many of the horses treated with *Settle* were infected with bacterial populations that were resistant even to antibiotics used as a last resort to treat bacterial infections in humans. This is a serious situation as these resistant bacteria are emerging in the human population.

In addition to developing alternatives to antibiotics, the focus of the Company's Animal Health division has been to become lead global providers of reproductive products and vaccines. On the reproduction side, the Company made two strategic acquisitions within the last two year that bolstered the

reproductive product portfolio: the assets of AB Technology Inc. were acquired in January, 2004 and the rights to the product *Cue-Mate* were acquired from Pfizer in April, 2004.

AB Technology Inc., a world leader in the development of embryo transfer media, materials and equipment for bovine and equine markets, now operates as a unit of Bioniche Animal Health USA, Inc. Synergies resulting from the merger will allow the Company to provide embryo transfer practitioners around the world with a range of superior livestock reproductive technologies and services. *Cue-Mate*® is a uniquely-designed progesterone delivery device for cows that enables dairy farmers and cattle producers to plan and manage the reproductive timing of their herds and is registered and marketed in Australia, New Zealand, Chile and Argentina.

At the same time, the Company expanded the market for its *Folltropin*®-V product into additional European countries. *Folltropin*-V acts as a follicle stimulating hormone for cattle and is a critical technology in the embryo transfer industry.

Food Safety

Over the past three years, more than 27,000 cattle have been vaccinated with the Company's *E. coli* O157:H7 cattle vaccine, the majority of which have been located in feedlots at the University of Nebraska-Lincoln. Studies are consistently showing a decrease in the number of feedlot cattle shedding this deadly bacteria in their manure. Two recent studies also showed a reduction in the number of cows colonizing the bacteria in the terminal rectal junction following vaccination. This is significant because it has been shown that *E. coli* O157:H7 bacteria colonize in extremely high numbers in this area, therefore, a reduction in the number of bacteria colonizing there will result in a decreased number of bacteria being shed into environment. Additionally, this vaccine is effective in reducing the number of animals shedding the bacteria in their manure, as evidenced by the third study.

Regulatory submissions are being prepared for both the Canadian Food Inspection Agency (CFIA) and the United States Department of Agriculture (USDA) as part of the regulatory process and the Company expects to file the U.S. submission in the late second quarter or early third quarter of fiscal 2006. To satisfy regulatory requests, additional safety studies are being performed in both Canada and the U.S. The U.S. study relates to the safety of the animals upon vaccination, while the Canadian study will focus on the safety of the individual performing the injection (to analyze the possible health effects of accidental injection, as requested by the CFIA).

General

The Company continued to expand its intellectual property portfolio over the past three years, with more than 30 patents applied for and more than 140 granted related to the Company's proprietary technologies during this period. In addition, 23 patent applications were filed. The Company continues to place high importance on the long-term protection of its intellectual property through patents in order to give greater return to stakeholders as the technologies are commercialized.

The Company was active in securing additional financing for the development of its key projects in the past three years.

- Most recently, in November 2004, the Company completed an equity financing of \$10 million by the Fonds de Solidarité des Travailleurs du Québec (FSTQ) and another \$2 million by the Fonds d'investissement bioalimentaire, sec (Fonds Bio) was completed in November, 2004. The funds are to support the Company's MCC bladder cancer trial, development of MCC in animals and the *E. coli* O157:H7 cattle vaccine.

- In February of 2004, a private placement offering of five million units at \$2 per unit netted the Company \$10 million in proceeds for the bladder cancer and *E. coli* O157:H7 cattle vaccine projects, and for general corporate purposes.
- In June, 2003, the private sale of 1,225,000 common shares at \$1.80 per share and a further 306,250 three-year warrants resulted in \$2,205,000 in gross proceeds for operational purposes.
- In May 2003, a \$13.5 million financing by a syndicate of Canadian institutional investors – the Business Development Bank of Canada, the Farm Credit Corporation and Manulife Financial – was completed. The second tranche of this loan, equal to \$9.45 million, closed in September, 2003. The proceeds were used to repay the balance of a \$9.0 million US convertible debenture held by a private investor group and for general corporate purposes.

In 2001, the Company entered into two loan agreements with Technology Partnerships Canada (TPC), a special operating agency of Industry Canada, for projects related to the MCC technology and the development and commercialization of the *E. coli* O157:H7 cattle vaccine. The Company used consultants to assist in the application for these funds, which was a complicated process due to the complexity of the projects. On September 23, 2005, Industry Canada informed the Company that the structure of compensation for these consultants did not conform to government rules and accordingly, the Company was put in default under the program. As a result, the Company entered into a settlement with Industry Canada on the same date, whereby the Company will pay to the government an amount equal to the portion of the consultants' fees that were in dispute, plus government costs, for a total amount of \$463,974.71 plus interest. This has put the Company back in good standing under the program.

The Company has responded to the increasing regulatory environment for public companies by enhancing the number of non-related Directors on its Board and by developing corporate policies in both governance and administration.

NARRATIVE DESCRIPTION OF THE BUSINESS

BUSINESS STRATEGY

The Company has a three-fold strategy. First, it will take the existing proprietary technologies and continue, through its research and development program, to enhance their proven therapeutic and prophylactic value for human and animal use. Secondly, the Company intends to enhance the intrinsic value of these technologies by commercialization, either alone or with strategic marketing partners. Thirdly, it will manufacture as many of its products emerging from the research program as it can to enhance profit margins, protect the integrity of its products and enhance shareholder value.

Following the disposition of the assets of Bioniche Pharma Group Limited, the Company will focus on opportunities in the development, licensing and marketing of its own products, including its key MCC bladder cancer project and other cancers, the important food safety *E. coli* O157:H7 vaccine, and the oligonucleotide technology platform.

HUMAN HEALTH PRODUCTS & DEVELOPMENT

Bioniche's Human Health business is operated through the division known as Bioniche Therapeutics Limited. The Company is engaged in the identification, development, production and commercialization of proprietary technologies for the human health market, which involves both pre-clinical and clinical research. The focus of activity is on the research and development of the Company's

proprietary MCC technology for the treatment of bladder cancer and its oligonucleotides. As well, the Company's commercialized proprietary product *Cystistat*® is marketed and sold through this division.

Products

Cystistat®

Cystistat® is made from hyaluronan (hyaluronic acid), one of the Company's platform technologies. *Cystistat* is indicated for the temporary replacement of the glycosaminoglycan (GAG) layer in the bladder. There is evidence that the GAG layer of the bladder is deficient in conditions known as cystitis, a syndrome of acute or chronic origin. This deficiency contributes to the clinical symptoms in diseases such as interstitial cystitis (IC), as well as cystitis caused by infections, trauma, urolithiasis, urinary retention, neoplasia and radiation induced cystitis. Treatment with *Cystistat* has been shown to alleviate clinical symptoms in patients with several of these conditions. *Cystistat* is registered and marketed as a medical device in Canada and Europe.

The Company continues to expand the marketplace for *Cystistat* by advancing its use for multiple types of cystitis, focusing on interstitial cystitis, cystitis caused by infections (bacterial cystitis) and radiation-induced cystitis. The Company has initiated and finalized several post-approval European and Canadian studies. The Company is currently engaged in discussions with the United States Food and Drug Administration regarding the pathway for regulatory approval of *Cystistat* in the United States.

The Company markets *Cystistat* directly in Canada through its own sales personnel, and has entered into exclusive distribution agreements with various pharmaceutical companies for the distribution of *Cystistat* world-wide. The Company currently distributes *Cystistat* through a network of distributors in the European Union, Asia, the Middle East and Brazil.

Cystistat is manufactured by Bioniche Pharma Group Limited in its facility in Galway, Ireland pursuant to a manufacturing and supply agreement with the Company. A number of alternate product suppliers are available in the marketplace. Accordingly, the Company does not expect the sale of Bioniche Pharma Group Limited to negatively impact its ability to maintain its source of supply for the product. *Cystistat* is manufactured from a specific molecular weight and purity of hyaluronan (sodium hyaluronate, or hyaluronic acid), which is commercially available from a few selected suppliers. The Company has entered into a favourable long-term supply contract for its requirements of hyaluronon with a major commercial supplier, and maintains relationships with back-up suppliers. The price of this material is expected to remain stable in the foreseeable future and comprises a small percentage of the price of the finished product.

Revenues from sales of *Cystistat* do not represent 15% of the Company's consolidated revenues.

Research and Development

MCC

MCC is the Company's lead technology platform. MCC is a cell wall-DNA composition prepared from a pure culture of the bacterium *Mycobacterium phlei*. The cell wall complex has been fractionated and purified to optimize the presence of the active principal component of the molecule, DNA, which is responsible for its immunomodulatory and direct anti-cancer activities. To date, the Company has conducted its own pre-clinical and clinical research programs in this area.

The Company has focused its pre-clinical and clinical research on the use of its proprietary MCC technology in the treatment of cancer. These research programs have demonstrated MCC's effectiveness

as an immunomodulator and antitumour agent in a range of models. The Company achieved a research breakthrough by identifying mycobacterial DNA as the active component of *Mycobacterium phlei* cell wall preparations.

The unique activity profile of MCC is comprised of the following:

- Immune stimulant activity (monocytes, macrophages, dendritic cells) as demonstrated by the ability to induce the synthesis of a range of cytokines and chemokines
- Immune adjuvant (vaccine) activity as demonstrated by the ability to stimulate antibody responses against antigens
- Direct anticancer activity as demonstrated by the ability to cause cell cycle arrest, inhibit proliferation and induce apoptosis in cancer cells

The ability to act as an immune stimulant and directly inhibit the proliferation of cancer cells places MCC in a unique category, that of an immunomodulator with chemotherapeutic activity. Such an activity profile is expected to have application in patients who are, or have the potential to be, immunocompromised through age or prior chemotherapy. It would also be applicable in patients where the cancer is known to be resistant to conventional chemotherapy through cell cycle regulator mutations or the selection of multidrug resistance.

The mycobacterial DNA in MCC induces programmed cell death (apoptosis) in cancer cells. The induction of apoptosis occurs in cancer cells including multidrug resistant cancer cells and in cells with mutations in cell cycle regulators. The induction of apoptosis is associated with a dose-dependent inhibition of cancer cell division. This activity has been demonstrated in a wide range of cancer cell lines derived from bladder, breast, leukemia, melanoma, colon, ovarian and prostate tumours. The Company believes that MCC's ability to induce apoptosis in cancer cell lines regardless of the presence of mutations in tumour suppressor genes and the expression of multidrug resistance phenotypes is significant. Accumulated mutations in cancer cells can often lead to significantly greater resistance to treatment, eventually making conventional chemotherapeutic strategies ineffective because of toxicity associated with the dose of chemotherapeutic drug required.

The ability of MCC to interact with chemotherapeutic agents to inhibit the division of human bladder cancer cells has been evaluated. Data to date demonstrates that MCC interacts synergistically with chemotherapeutic agents, thus offering the potential for combination therapy, either a means of enhancing the activity of MCC or of enabling a dose-sparing regimen for the chemotherapeutic agent.

MCC induces macrophages to produce a range of cytokines including IL-6 and IL-12. IL-12 is known to possess anti-angiogenic activity (prevention of blood vessel formation in tumours) and to activate NK (natural killer) and cytotoxic T lymphocytes that are associated with anticancer responses. MCC acts as an immune stimulant following intravesical administration, as evidenced by increased levels of urinary cytokines, or following systemic administration, as evidenced by increased levels of cytokines in circulation.

The potential for MCC to act as anticancer agent in other oncology indications has been evaluated in preclinical study using a model of peritoneal colon carcinomatosis. This model mimics many characteristics of peritoneal carcinomatosis associated with metastatic colorectal, ovarian, gastric and breast cancer, and is known to respond to immunomodulatory anticancer agents such as LPS, lipid A and BCG. The results of this study demonstrate that MCC is effective in inducing long-term survival (T/C%>450) when used to therapeutically treat micrometastases. MCC appears to be effective in the treatment of macrometastases (T/C%>300 and at least equipotent with cisplatin, a chemotherapeutic agent used to treat metastatic disease (data presented at the Second international Conference on immunopotentiators in Modern Vaccines, Malaga, Spain, 2005).

The Company has further extended the scope of application of MCC by examining its potential to act as an anticancer agent/immune stimulant in dogs. MCC has been shown to act against canine osteosarcoma cell lines (inhibition of proliferation and induction of apoptosis), as well as interacting synergistically with anti-osteosarcoma chemotherapeutic agents (data presented at the 22nd Annual American College of Veterinary Medicine Meeting, Minneapolis, Minnesota, USA, 2004). The treatment of canine cancer with conventional chemotherapeutics has many of the problems seen in the treatment of human cancer,) for example, multidrug resistance, lack of efficacy and toxicity). As well, a collaborative study has been initiated with Dr. D. Knapp of Purdue University, West Lafayette, to investigate the potential for MCC to treat advanced bladder cancer in dogs. The results obtained to date demonstrate an objective anticancer activity in 6/11 dogs treated to date (>50% reduction in tumour volume) and stabilization of disease in 4 dogs (<50% reduction in tumour volume). Prior failure to conventional anticancer therapy does not appear to affect the anticancer activity of MCC. These studies are expected to identify an appropriate treatment regimen for the use of MCC as a treatment for advanced bladder in dogs, and by extension, advanced bladder cancer in humans. MCC appears to be well-positioned for use in this expanding marketplace.

Consolidation of the activity profile of MCC has been achieved by initiating studies to determine the immune adjuvant activity. MCC is a potent immune adjuvant at low doses, and is capable of inducing high levels of antibodies using both model (serum albumin) and therapeutic antigens such as hepatitis B surface antigen (data presented at the Modern Vaccine/Adjuvant Formulation: Impact on Future Development meeting, Prague, Czech Republic, 2004).

The Company's primary research objective is to develop formulations of MCC for the treatment of a range of cancers. The Company's clinical research and development is described below.

MCC For Bladder Cancer

The Company's Phase I/II studies using MCC emulsion to treat superficial urinary bladder cancer have been completed. The studies involved fifty-five patients who suffered from carcinoma in situ (CIS), an aggressive and difficult to treat forms of superficial bladder cancer, which was refractory to the traditional treatments of Bacillus Calmette-Guérin (*BCG*) or chemotherapy. The positive results were presented at the annual meetings of the American Urology Association in May, 2004 and the Canadian Urology Association in June, 2004. The data presented confirms MCC activity for the treatment of patients with CIS at the doses of 4 mg and 8 mg per intravesical instillation. The 8 mg dose was shown to be more effective in the terms of efficacy, remains very well tolerated and has been proposed as the active dose to be tested in the Phase III pivotal clinical trial.

The Company is now preparing to initiate its Phase III clinical trial, working in conjunction with international clinical experts, and discussions are ongoing with regulatory agencies. The proposed pivotal study will recruit patients in North America and Europe in an international randomized comparative Phase III study involving approximately sixty clinical sites in both continents. Dr. Alvaro Morales, Professor of Urology and Oncology at Queen's University in Kingston, Ontario will be the International Principal Investigator. Dr. Harry Herr, Urologist and Oncologist/Fellow at Memorial Sloan-Kettering Cancer Center in New York and at the New York Hospital – Cornell Medical Center will be the North American Principal Investigator, and Dr. Laurent Boccon-Gibod, Urologist and Oncologist at the Bichat-Claude Bernard Hospital in Paris, France will be the European Principal Investigator. The Company has also initiated discussions with different collaborative groups and granting agencies for the support of this pivotal program.

The target population for the Phase III trial will be patients with superficial bladder cancer who are at high risk for progression or recurrence. MCC will be compared directly to Bacillus Calmette-Guérin (*BCG*), the current standard treatment for this cancer. This is a patient population in North

America and Europe of approximately 96,000 new patients per year, each requiring forty-two doses over a three-year period. The Company is working on the development of a single protocol for the trial which will be utilized in all jurisdictions with an international panel of experts, and is in ongoing consultations with the United States Food and Drug Administration (FDA), the Canadian Health Protection Branch and the European Medicines Agency (EMA).

The Company expects to confirm the Phase III requirements by the end of calendar 2005. The Company is actively seeking a strategic relationship with a commercial partner to assist in the funding of the clinical trial and marketing of the product in Europe while retaining the responsibility for the North American market. This is in keeping with the Company's business strategy of developing proprietary technologies to late stage before commercializing and, in markets where it is less experienced, finding strategic partners to assist in getting the product to key customers.

MCC for Prostate Cancer

The Phase I clinical study in prostate cancer using MCC and hyaluronan (hyaluronic acid) was presented at the 19th Annual Congress of the European Urological Association in March, 2004. As the Company is now focusing its resources toward the pivotal trial in superficial bladder cancer, this program will be continued once the appropriate funding can be gathered.

MCC for Other Indications

The non-clinical and clinical data produced by the Company in the past few years has generated a significant interest in the clinical oncology as well as the urological oncology communities. The Company is actively discussing other potential indications of MCC with opinion leaders in oncology for the treatment of locally accessible tumours, such as ovarian cancer or metastatic hepatic cancers. These programs will be initiated once additional funding is available.

Oligonucleotides

In 2000, the Company announced the discovery of a new class of molecules with potential anticancer activity, referred to by the Company under the trademark "*Oligomodulator*"TM. This new class of molecules with potential clinical anticancer activity and immune modulating properties is composed of short DNA oligonucleotides that appear to possess a range of novel pharmacological activities.

The Company's pre-clinical research indicates that the ability of these molecules to inhibit the division of human cancer cells occurs as a result of blocking the cell cycle and inducing programmed cell death (apoptosis). These oligonucleotides also have the ability to stimulate cytokine synthesis from certain mononuclear cells. Activity has been demonstrated against a range of different human cancer cell types, thus offering potential for their development as novel chemotherapeutic agents with wide ranging applicability for the treatment of cancer.

- On September 19, 2002, the Company presented positive pre-clinical proof of principle data demonstrating *in vivo* anticancer activity against leukemia and lymphoma of *Oligomodulator*TM BT99-25, one of its lead anti-cancer oligonucleotide, at the GOAL Leukemia 2002 meeting, held in Miami, Florida.
- On May 30, 2003, the Company presented positive pre-clinical proof of principal data demonstrating immune stimulant and vaccine adjuvant activity of its oligonucleotides BT 99-25 and BT 99-45 at the Modern Vaccines and Adjuvant Delivery Systems Symposium, held in Dublin, Ireland.

- On July 21, 2004, the Company presented positive data demonstrating that its oligonucleotides have the ability to act as co-stimulators for T-cells, and thus possess a type 2 adjuvant activity at the 12th International Congress of Immunology, Montreal, Quebec. Stimulation of mature dendritic cells was also demonstrated in the same study. These data provide a mechanistic explanation of the in vivo adjuvant activity previously observed. These results emphasize the potential therapeutic range of application of these molecules (immune stimulant and vaccine adjuvant).

This new technology platform has the ability to quickly synthesize and test new sequences and analogues and the potential to develop oligonucleotide combinations for specific applications (the “toolbox” approach). This approach will enable the Company to tailor the pharmacological activity of the oligonucleotides to the disease (e.g. direct anticancer activity or immune stimulation/vaccine adjuvant activity).

In management’s view, these recent discoveries represent a significant step forward in the expansion of the Company’s technology platform base, which now encompasses both biological and pharmaceutical-based small drug therapeutic entities. It is believed the identification of these molecules will also continue to enhance the Company’s intellectual property portfolio. The recent data provides the Company with a solid basis for the clinical development of the *Oligomodulator*TM platform. Since June 30, 2003, the Company filed four additional patent applications for this technology.

The Company is now proceeding to develop the oligonucleotide platform through additional pre-clinical research in the immunomodulatory and anti-cancer areas. Opportunities to partner on the further development of this technology will be explored by the Company in fiscal 2006.

Market Analysis

Cystistat®

Cystistat is indicated for treatment of various types of cystitis including interstitial cystitis, radiation cystitis and bacterial cystitis.

The size of the interstitial cystitis market is difficult to assess, as accurate diagnosis is very difficult. It is estimated by management that 180,000 people in the United States have interstitial cystitis. The prevalence of the condition in Europe is believed by management to be approximately the same as in the United States, implying a potential combined European and American market of up to 400,000 sufferers. Management believes that a course of treatment, which consists of between six to twelve doses, implies a potential American and European market of approximately \$250 million U.S.

In the United States, approximately 517,000 cases of prostate, uterine, bladder and rectal cancer are diagnosed each year. Of these, management estimates that approximately 125,000 are treated with radiation and approximately 20% develop severe radiation cystitis. The prevalence of this condition in Europe is believed by management to be approximately the same as in the United States. Assuming a treatment of four doses, management believes that the potential European and American market is estimated at \$15 million U.S.

MCC

The Company is currently pursuing the application of the MCC technology for the treatment of bladder cancer. The size of the bladder cancer market in the U.S. was estimated to be \$369.5M and \$207.2M for the EU5 (France, Germany, Italy, Spain, United Kingdom) in 2003 ⁽¹⁾. In addition to bladder

cancer, management believes the Company's MCC technology has potential as an anti-cancer therapy, both alone and in combination with existing therapies, for the treatment of additional cancers such as, prostate, adenocarcinomas and certain types of leukaemia. The Company is evaluating the potential of the technology in other cancers, specifically those that are resistant to immunotherapy and chemotherapy.

The Company believes that, following successful demonstration of clinical efficacy, MCC may be used in combination with existing therapies. This will largely be the case in those cancers where such treatment is known to be of marginal effectiveness due to the development of treatment resistance. While full market penetration is not envisaged for any of the following cancers, the market potential for MCC can be estimated by reference to cancer estimates in North America for 2002.⁽²⁾

<u>Cancers</u>	<u>Incidences</u>	<u>Deaths</u>
Prostate	257,943	36,447
Breast	229,631	48,239
Lung	225,641	178,349
Colon and rectum	183,473	66,360
Urinary bladder ⁽³⁾	70,006	13,860
Melanoma	57,470	8,389
Leukaemia	38,506	24,084
Pancreas	34,922	33,620
Ovarian	25,162	16,005
Cervical	14,670	5,796

- (1) Bladder Cancer Report, Decision Resources, Inc., December 2004
- (2) GLOBOCAN 2002, IARC – International Agency for Research on Cancer
- (3) European incidence is estimated at 138, 973 – GLOBOCAN 2002, IARC

Competition

Cystistat®

The interstitial cystitis market represents an unmet medical need. The current market for *Cystistat*® is composed of two therapeutic categories for the treatment of interstitial cystitis: intravesical and oral therapy. *Elmiron*, an oral therapy currently available in the United States, may take more than six months to provide patients with symptom relief. A recent randomized placebo controlled pilot trial on the use of a combination of pentosan polysulfate sodium (*Elmiron*) and hydroxyzine was published in 2003 and showed no statistical difference in the response rate. Other therapies in development, namely resiniferatoxin (RTX), tibial nerve stimulation and *BCG* have also recently failed to reach statistical significance. *Cystistat* has been clinically shown to provide relief in the shorter term. Dimethylsulfoxide (DMSO) is an alternative intravesical therapy, but it is not widely accepted by interstitial cystitis patients due to some side effects.

Management believes that *Cystistat* has competitive advantages over these products, including proven efficacy, a favourable safety profile and the achievement of symptom relief in a shorter period of

time. As the Company continues to generate additional clinical data to demonstrate clinical efficacy, and as distributors are established in the European market, management believes that it will be able to increase its position in the interstitial cystitis market.

The Company has continued its efforts to expand the therapeutic indications of Cystistat by initiating and finalizing post approval studies at various European and Canadian research institutions to support the marketing efforts.

Oncology

The Company's product candidates for cancer treatment will face competition from both currently used therapies and from new therapies based on the use of novel compounds. The Company expects it may experience competition from established and emerging pharmaceutical and biotechnology companies that have other forms of treatment for the diseases targeted by the Company, as well as from other companies operating in the same therapeutic fields. The Company may also experience competition from companies that have acquired or may acquire technology from universities and other research institutions.

The Company may face significant competition as it expands its development programs to include drugs to treat diseases for which a variety of treatments already exist. The Company faces similar competitive concerns from biotechnology companies that are working to develop novel treatments based on new classes of compounds. However, as an oncology regimen often uses a number of drugs in combination, the market for the Company's drugs may not necessarily exclude the use of other treatments.

In addition, the Company may face competition from other companies for opportunities to enter into collaborative arrangements with pharmaceutical and biotechnology companies and academic institutions and to obtain licenses to proprietary technology from other parties.

Human Health Development

Human health: a pipeline for growth

PRODUCT	THERAPEUTIC AREA	CATEGORY	RESEARCH	PRECLINICAL	PHASE I	PHASE II	PIVOTAL
MCC	Bladder Cancer	Drug	██████████	██████████	██████████	██████████	██████████
MCC	Prostate Cancer	Drug	██████████	██████████	██████████	██████████	██████████
MCC	Other Cancers	Drug	██████████	██████████	██████████	██████████	██████████
BT 99-25	Leukemia	Drug	██████████	██████████	██████████	██████████	██████████
Oligo	Other Cancers	Drug	██████████	██████████	██████████	██████████	██████████
Oligo	Immunomodulator	Drug	██████████	██████████	██████████	██████████	██████████

Regulatory Environment – Human Health

Regulation by government authorities in Canada, the United States and the European Union is a significant factor in the research and development activities of the Company. In order to clinically test, manufacture and market drug products for therapeutic use for humans, the Company must satisfy the rigorous mandatory procedures and standards established by the regulatory agencies in the countries in which it currently operates or intends to operate. In addition, different regulations apply to medical devices and natural health products, which must be adhered to for those types of products.

The laws of most of these countries require the licensing of manufacturing facilities, carefully controlled research and the extensive testing of products. Biopharmaceutical companies must establish the safety and efficacy of their new products and control over marketing activities before being allowed to

market their products. The safety and efficacy of a new drug must be demonstrated through clinical trials of the drug carried out in accordance with the mandatory procedures and standards established by regulatory agencies. In addition, prior regulatory approval is required before conducting any type of clinical research in humans.

The pharmaceutical industry is required to manufacture products according to current Good Manufacturing Practice (cGMP). cGMP rules may vary slightly between countries, but they provide manufacturers with guidance on what the government expects with respect to premises, equipment, sanitation, personnel, manufacturing control, quality control, testing, stability, and sample and documentation retention. In essence, cGMP states that all aspects of the manufacture of a pharmaceutical product must be documented and controlled, from receipt of the materials used to make the product to shipment of the product to the customer. cGMP is enforced through inspection by the Health Products and Food Branch Inspectorate (HPFBI) division of the Health Products and Food Branch of Health Canada (the HPFB) in Canada, the Food and Drug Administration (the FDA) in the United States and by individual country regulatory authorities in the European Union. GMP manufacturing applies not only to product manufactured following product licensing for commercial distribution, but also to product manufactured for use in clinical trials. This means that long before a product is commercialized, there is a need for cGMP manufactured product.

Regulatory compliance can take several years and can involve substantial expenditures. For instance, the entire process for human therapeutics from research to market introduction may take as long as twenty years and cost from tens to hundreds of millions of dollars. There can be no assurance that difficulties or excessive costs, will not be encountered by the Company in its efforts to secure necessary approvals. These could delay or prevent the Company from manufacturing or marketing its products.

Canada

In Canada, new drugs are reviewed and approved by the Therapeutic Products Directorate (TPD), while new biologics are reviewed and approved by the Biologics and Genetic Therapies Directorate (BGTD). New drugs and biologics must pass through a number of testing stages, including pre-clinical testing and clinical trials. Pre-clinical testing involves testing the chemistry, pharmacology and toxicology in a new product *in vitro* and in animals. Successful results (that is, potentially valuable pharmacological activity combined with an acceptable level of toxicity) enable the manufacturer of the new drug to file a Clinical Trial Application (CTA) to begin clinical trials involving humans. As well, manufacturers and testing laboratories are required to have an establishment license issued by HPFBI in order to be able to manufacture or test. This license is issued based on the manufacturer's compliance with GMP.

In order to begin clinical trials in Canada, a CTA must be filed with the TPD or BGTD. The CTA must contain specified information, including the results of the pre-clinical tests completed at the time of the submission and any available information regarding use of the product in humans. In addition, since the method of manufacture may affect the efficacy and safety of a new drug or biologic, information on the manufacturing methods and standards and the stability of the substance and dosage form must be presented to enable TPD or BGTD to conclude that the new drug that may eventually be sold to the public has the same composition as that determined to be effective and safe in the clinical trials. Production methods and quality control procedures for each approved product must be in place to ensure an acceptably pure product, essentially free of contamination, and to ensure uniformity with respect to all quality aspects.

Provided the TPD or BGTD does not reject a CTA, clinical trials can begin. Clinical trials are carried out in three phases or a combination thereof. Phase I involves studies to evaluate toxicity in humans. The new drug is administered to human patients who have met the clinical trial entry criteria in

order to determine safety, human tolerance and prevalence of adverse side effects. Phases II and III involve therapeutic studies. In Phase II, efficacy, dosage, side effects and safety are established in a small number of patients who have the disease or disorder that the new drug is intended to treat. In Phase III, there are controlled clinical trials in which the new drug is administered to a statistically significant number of patients who are likely to receive benefit from the new drug. In Phase III, the effectiveness of the new drug is compared to that of standard accepted methods of treatment in order to provide sufficient data for the statistical proof of safety and efficacy for the new drug.

If clinical studies establish that a new drug has value, the manufacturer submits a New Drug Submission (NDS) application to the TPD or BGTD for marketing approval. The NDS contains all information known about the new drug, including the results of preclinical testing and clinical trials. Information about a substance contained in a NDS includes its proper name, its chemical name, details on its method of manufacturing and purification and its biological, pharmacological and toxicological properties. The NDS also provides information about the dosage form of the new drug, including a quantitative listing of all ingredients used in its formulation, its method of manufacture, packaging and labelling, the results of stability tests, and its diagnostic or therapeutic claims and side effects, as well as details of the clinical trials to support the safety and efficacy of the new drug. All aspects of the NDS are critically reviewed by the TPD or BGTD. If an NDS is found satisfactory, a Notice of Compliance is issued permitting the new drug to be sold in Canada.

The TPD or BGTD has a policy of priority evaluation of new drug submissions for all drugs or biologics intended for serious or life-threatening diseases for which no comparable drug product has received regulatory approval in Canada and for which there is reasonable scientific evidence to indicate that the proposed new drug is safe and may provide effective treatment. In addition, a policy called the NOC/c policy (Notice of Compliance with conditions) will allow a Notice of Compliance to be issued for drugs or biologics intended for serious or life-threatening disease for which there is reasonable evidence of safety and efficacy, with the condition that the sponsor will conduct additional studies to support that evidence.

The monitoring of a new drug or biologic does not cease once it is on the market. For example, a manufacturer of a new product must report any new information received concerning serious side effects, as well as the failure of the new product to produce desired effects. As well, if the TPD or BGTD determines it to be in the interest of public health, a Notice of Compliance for a new drug may be suspended and the new drug may be removed from the market.

An exception to the foregoing requirements relating to the manufacture and sale of new drugs is the limited authorization that may be available in respect of the sale of new drugs and biologics for emergency treatment. Under this Special Access Programme, the TPD may authorize the sale of a quantity of a new drug for human use to a specific practitioner for the emergency treatment of a patient under the practitioner's care. Prior to authorization, the practitioner must supply the TPD with information concerning the medical emergency for which the new drug is required, such data as is in the possession of the practitioner with respect to the use, safety and efficacy of the new drug, the names of the institutions at which the new drug is to be used and such other information as may be requested by the TPD. In addition, the practitioner must agree to report to both the drug manufacturer and the TPD the results of the new drug's use in the medical emergency, including information concerning any adverse reactions, and must account to the TPD for all quantities of the new drug made available.

The Canadian regulatory approval requirements for new drugs outlined above are similar to those of other major pharmaceutical markets. While the testing carried out in Canada is often acceptable for the purposes of regulatory submissions in other countries, supplementary testing may be requested by individual regulatory authorities during their assessment of any submission. There can be no assurance

that the clinical testing conducted under the HPFB authorization or the approval of regulatory authorities of other countries will be accepted by regulatory authorities outside Canada or such other countries.

The Company also markets two products which are considered medical devices in Canada (*Cystistar*® and *Suplasyn*®). Products are classified as medical devices if they are represented for use in restoring, correcting or modifying a body function or the body structure, and are licensed by the TPD. Licensing is a relatively new requirement in Canada and the Company has been allowed to license their products under a “grandfather” status without submission of additional supportive data. All manufacturers of medical devices in Canada must be registered under a quality system which closely resembles the ISO 9000 series quality standard.

United States

In the United States, the manufacture and sale of new drugs is controlled by the Food and Drug Administration (FDA). New drugs require FDA approval of a marketing application (i.e. a New Drug Application (NDA) or product license application) prior to commercial sale. To obtain marketing approval, data from adequate and well-controlled clinical investigations demonstrating to the FDA’s satisfaction a new drug’s safety and effectiveness for its intended use are required. Such data are generated in studies conducted pursuant to an Investigational New Drug (IND) submission, similar to that required in Canada. As in Canada, clinical studies are characterized as Phase I, Phase II and Phase III trials or a combination thereof. In a marketing application, the manufacturer must also demonstrate the identity, potency, quality and purity of the active ingredients of the new drug, and the stability of those ingredients. Further, the manufacturing facilities, equipment, processes and quality controls for the new drug must comply with the FDA’s GMP regulations for drugs or biologic products, both in a pre-licensing inspection and in subsequent periodic inspections after licensing. In the case of a biologic product, an establishment license must be obtained prior to marketing and batch releasing.

A five-year period of market exclusivity for a drug comprising a new chemical entity (NCE) is available to an applicant that succeeds in obtaining FDA approval of an NCE, provided the active ingredient of the NCE has never before been approved in a NDA. During this exclusivity period, the FDA may not accept for review any abbreviated application filed by another sponsor for a generic version of the NCE. Further, a three-year period of market exclusivity for a new use or indication for a previously approved drug is available to an applicant that submits new clinical studies that are essential to support the new use or indication. During the latter period of exclusivity, the FDA may not approve an abbreviated application filed by another sponsor for a generic version of the product for that use or indication.

A new drug may be approved using an Abbreviated New Drug Application (ANDA) if the drug is a copy of an already marketed drug (listed drug) which is not governed by an exclusivity or patent agreement. ANDAs must include information to prove that the product is equivalent to the listed drug in active ingredients, dosage, form, strength, route of administration and condition of use. ANDAs do not require the applicant to demonstrate safety or efficacy. The applicant must only demonstrate therapeutic equivalence to the listed drug.

The FDA has “fast track” regulations intended to accelerate the approval process for the development, evaluation and marketing of new drugs used to diagnose or treat life-threatening and severely debilitating illnesses for which no satisfactory alternative therapies exist. Fast track designation affords early interaction with the FDA in terms of protocol design, and it permits (although it does not require) the FDA to issue marketing approval after completion of early stage clinical trials. The FDA may, however, require subsequent clinical trials or post-approval efficacy studies.

It is the Company's intention to request approval to license medical devices in the United States. Licensing of these devices in this market requires clinical investigations to be carried out prior to pre-market approval by the FDA. It also requires compliance with the Quality System Requirements (21CFR Part820) and potential audit by FDA to this quality standard.

European Union

Regulatory requirements in the European Union are similar in principle to those of the United States. For novel products, a two-part product approval process by the European Medicines Agency (EMA) known as the "centralized process" is required. Clinical testing and manufacturing facilities and procedures data are presented in a Marketing Authorization Application filed with the Committee for Medicinal Products for Human Use (CHMP). The CHMP reviews the application in order to express an opinion about whether the new drug meets the requirements for marketing authorization. If a favourable opinion is received from the CHMP, approval to market the new drug must then be obtained from the appropriate government agency of each European Union country.

An alternate means of approval in the European Union for products which are not novel is the use of a Mutual Recognition Procedure. In this case, one European Union country is chosen as the reference member country and application is made to that country. If approved, the application then goes to any other European Union countries in which registration is desired simultaneously for review based on the reference member countries' recommendations.

Clinical trials conducted in EU countries require pre-approval by the regulatory authority for each country where the trial will be conducted. Clinical Trial Applications (CTAs) are made to each country, simultaneously with Ethics Committee applications. Once both approvals are received, the trial may be initiated. This could trigger audits of the manufacturer of the clinical trial product or of the investigators by any of the EU country's regulatory authorities.

General

In general, the process of completing clinical trials and obtaining regulatory approval for a new drug for human use takes a number of years and requires the expenditure of substantial resources. Once a new drug or product license application is submitted, there can be no assurance that a regulatory agency will review and approve the application in a timely manner. Also, regulatory agencies may require post-marketing surveillance programs to monitor a new drug's side effects. Results of post-marketing programs may limit or expand the further marketing of new drugs. A serious safety or effectiveness problem involving an approved new drug may result in a regulatory agency requiring withdrawal of the new drug from the market and possible civil action.

In addition to the regulatory product approval framework, biopharmaceutical companies, including the Company, are subject to regulation under provincial, state and federal law, including requirements regarding occupational safety, laboratory practices, environmental protection and hazardous substance control, and may be subject to other present and future local, provincial, state, federal and foreign regulation, including possible future regulation of the biotechnology industry.

ANIMAL HEALTH PRODUCTS & DEVELOPMENT

The Company's animal health business is operated through the division known as Bioniche Animal Health, which is responsible for researching, developing, manufacturing and marketing animal health biopharmaceutical products worldwide. The Company's animal health products are marketed directly in Canada, the United States, Australia and Europe and through selected distributors in the rest of

the world. Bioniche Animal Health operates marketing, production and research facilities in Belleville, Ontario; marketing and manufacturing units in Athens, Georgia and in Pullman, Washington in the United States; a manufacturing facility in Armidale, Australia; and a sales and marketing office in Ireland.

The Company is committed to the discovery and development of innovative biologicals and biopharmaceutical products for the health management of animal diseases. The business strategy has been to consolidate the Company's position in the Canadian market and to build from that into the United States and other parts of the world. During fiscal 2004, the Company made two strategic acquisitions. The first was the acquisition of the assets of AB Technology Inc., a world leader in the development of embryo transfer media, materials and equipment for bovine and equine markets. AB Technology now operates as a unit of Bioniche Animal Health USA, Inc. Synergies resulting from the merger will allow the Company to provide embryo transfer practitioners around the world with a range of superior livestock reproductive technologies and services. In fiscal 2005, the AB Technology business was absorbed into the Bioniche reproduction business on a global basis and sales increased significantly, especially in the United States. Future efforts will be centred around sales expansion in export markets. The second acquisition was the *Cue-Mate*® device which is a uniquely-designed progesterone delivery device for cows that enables dairy farmers and cattle producers to plan and manage the reproductive timing of their herds. The Company acquired the intellectual property and other assets of the *Cue-Mate* business from Pfizer Inc. *Cue-Mate* is registered and marketed in Australia, New Zealand, Chile, and Argentina

Revenues from sales of the Company's Animal Health products were \$25,346,607 in 2005 and \$26,883,321 2004. There is a seasonality effect upon the revenue stream of the Company. The second half of the year, from January to June, is always the strongest from a revenue flow perspective, representing slightly more than 55% on average .

Products

The Company has progressively grown by using biotechnology to provide the veterinary market with innovative solutions to meet the changing needs of the animal health industry. The Company has a product portfolio of over sixty products, based on five platform technologies. The animal health technology platforms can be categorized in the following product groups: reproduction and embryo transfer products; products based on hyaluronan; immunostimulant products; polyclonal antibodies and vaccine products; and nutraceuticals.

Reproduction and Embryo Transfer Products

The Company's research into the purification and production of reproductive hormones has resulted in the successful commercialization of *Folltropin*®-V, *Lutropin*®-V and *Pregnecol*™ hormone preparations designed for breeding programs in the cattle and swine industries. *Folltropin*-V is used in the embryo transfer industry to induce superovulation in cattle and sheep. *Folltropin*-V is sold in Canada, the United States, Australia, New Zealand, Latin America and Ireland. During fiscal 2005, registrations for *Folltropin*-V were granted in the Netherlands, UK, Italy and Spain. Registration dossiers are being generated for additional markets in the European Union and Asia. *Lutropin*-V leutinizing hormone is used to induce ovulation in cattle and sheep as well as to treat cystic ovaries in dairy cows. *Pregnecol* is sold in Australia, Canada, Israel, Palestine and New Zealand. This product is also registered in Ireland as *Stimovar*™. *Pregnecol* is used to increase reproductive efficiency in livestock by increasing ovulation rates and inducing estrus. The fixed time artificial insemination protocol using *Lutropin*-V and *Pregnecol*, so that swine farmers can synchronize the time of artificial insemination, has received a positive reaction from the Canadian swine industry. Successful embryo transfer requires not only hormones but a variety of media including our *ViGro*™ media line and other supplies that Bioniche Animal Health USA Inc. Media used for embryo transfer does not require registration and can therefore

be sold into every country without difficulty. The Company has an ongoing research program in reproduction and embryo transfer products.

Folltropin-V and *Lutropin* are manufactured by the Company in its facility in Belleville. The main ingredient is pig pituitary glands, which are sourced from a supplier with whom the Company has had a long term relationship. The price of this material can be expected to remain stable for the upcoming year. Alternate sources of this material are few but do exist. The raw material forms a small percentage of the price of finished product.

Pregnenol is manufactured by Bioniche at its facility in Armidale, Australia, using equine serum sourced from its horse farm in the same location. The Company's media products are manufactured in its facility in Pullman, Washington.

Hyaluronan Products

Hyaluronan (hyaluronic acid) is a naturally occurring constituent of connective tissue and joint fluid. The use of hyaluronan in veterinary science is not new, but the Company has focused its research in two areas. The first is as a treatment for osteoarthritis, particularly in horses. *Enhance*®, registered in Australia and New Zealand, is used as a replacement for synovial fluid, the naturally occurring lubricant in articular joints. Osteoarthritis is associated with synovial fluid degradation, the result being a loss of lubricant effect and considerable pain. Administration of *Enhance* inter-articularly into affected joints replaces and augments the natural supply of synovial fluid. Intra-articular hyaluronic acid therapy in horses is widely accepted around the world. The Company's second area of focus is a patented use of hyaluron as a cryopreservative called (*MAP*®-5) for embryos in the embryo transfer industry.

These products are manufactured by Bioniche Pharma Group Limited in its facility in Galway, Ireland pursuant to a manufacturing and supply agreement with the Company. A number of alternate finished goods suppliers are available in the marketplace. Accordingly, the Company does not expect the sale of Bioniche Pharma Group Limited to negatively impact its ability to maintain its source of supply for the product. *Cystistat* is manufactured from raw hyaluronic acid, which is commercially available from numerous raw material suppliers. The Company has entered into a favourable long-term supply contract for its requirements of raw hyaluronic acid with a major commercial supplier, and maintains relationships with back-up suppliers. The price of raw material forms a small percentage of the price of finished products.

Immunostimulant Products: Mycobacterial Cell Wall Extract (MCWE)

Immunostimulants are a part of an emerging technology in the large animal medicine field called immunotherapy. Mycobacterial Cell Wall Extract (MCWE) has been the focus of the Company's research and development program. The basis of immunotherapeutics is to stimulate a network of non-specific immune system cells. Using the animal's own immune system, immunostimulants can be used to enhance the innate immune system to fight disease. Derived from a naturally occurring bacterium - *Mycobacterium phlei* - MCWE is an inactivated, deproteinized, delipidated, injectable cell wall extract with immunomodulating properties. This technology is the precursor to MCC, which is the lead technology in the Company's human cancer research program.

The Company has a strong proprietary position for this technology. It is the active ingredient in three registered products in North America: *Regressin*®, *Equimune*® IV and *Immunoboost*®. *Equimune IV* is also registered in Australia. *Regressin* is licensed as a treatment for specific cancers in companion animals. *Equimune IV* is a patented immunostimulant for the treatment of equine respiratory disease. *Immunoboost*, a mycobacterium cell wall fraction immunostimulant, is the first immunostimulant licensed for bovine infectious disease therapy. *Immunoboost* is also indicated for the treatment of neonatal calf

diarrhea caused by the *E. coli* bacterium. This bacterium has developed resistance to antibiotics, thus rendering many antibiotics ineffective.

The USDA approved the MCWE product *Settle*TM in December, 2004 as an aid in the treatment of equine endometritis. Although it is non-life threatening, endometritis has the potential to significantly impact the equine industry by lowering conception rates and increasing pregnancy losses. Currently, the United States is the only country in which *Settle* is registered, however, the Company plans to expand this registration into other countries.

The MCWE portfolio of products is manufactured by the Company at its facility in Athens, Georgia.

Vaccine Products

Polyclonal Antibodies

The Company's product, *Colimune*®, is a polyclonal antibody product developed as a means of preventing K-99 *E. coli* infections in calves. Under normal situations, the mother cow produces antibodies in the first milk (the colostrum) to provide sufficient antibodies to coat the gut wall of the neonatal calf. Where the mother fails to do this, or if the mother was not vaccinated, *Colimune* is used to prevent an *E. coli* outbreak from affecting the entire herd, thus reducing calf losses. This product is manufactured by the Company in its facility in Belleville, Ontario.

Vaccines

Sound animal health management programs focus on disease prevention. Vaccines provide immunity against specific diseases that threaten animals. Bioniche Animal Health's research and development program has focused on the development of a wide range of animal vaccines for use in cattle, swine and equine species. All of the Company's vaccines use killed bacteria or viruses in contrast to some companies that produce live vaccines using attenuated or mutated live viruses. The Company's focus is on producing vaccines that are effective and have proven safety profiles. Bioniche Animal Health has developed a range of vaccines for both swine and cattle as part of its objective to find alternatives to the use of antibiotics in livestock. Bioniche Animal Health is currently in the research phase of a new generation of vaccines where the immunomodulation initiated by MCC will be harnessed with commercially important antigens. These products are sourced in bulk from third party suppliers and processed and filled by the Company at its Belleville, Ontario facility.

Nutraceuticals

The Company continues to explore opportunities in the growing nutraceutical field. This research area is a natural extension of the Company's extensive animal health research in the field of immunology. Current products include Echi-FendTM, an echinacea product for the equine industry and Omega-FendTM, an essential fatty acid supplement used to treat skin conditions in dogs. Research is ongoing to develop a botanical insect repellent as well as other natural health products for the human, equine and companion animal markets. These products are manufactured by the Company in its facility in Belleville Ontario. Raw materials for these products are readily available.

Research and Development

The Company's research program has an active product development pipeline in the following areas. The Company performs research activities itself and through the use of research partnerships and contract research agreements.

Reproduction and Embryo Transfer Products

The Company has responded to market demands for safer products which do not contain material of animal origin by developing synthetic media which incorporate its patented hyaluronan technology.

Immunostimulants

Market demand and regulatory requirements for products with decreased risk of disease transmission have prompted the Company to change its manufacturing processes to produce biological products, including current immunostimulants, which do not contain material of animal origin. This will be an ongoing research and development program in the future.

Vaccines

The Company is currently developing and conducting trials with respect to several vaccines to treat bovine and equine diseases, such as, a recombinant multivalent vaccine for bovine diarrhea and a vaccine against Rhodococcus equi, a chronic bronchopneumonia in foals.

In Development

PRODUCT	THERAPEUTIC AREA	CATEGORY	RESEARCH	PROOF OF CONCEPT TRIALS	REGULATORY TRIALS
Media	Reproduction	-----	██████████	██████████	██████████
E.Coli/Rota/Corona	Enteritis	Vaccine	██████████	██████████	██████████
R. equi	Respiratory	Vaccine	██████████	██████████	██████████

Sales and Marketing

The Company’s priority customer is the veterinarian. The Company’s products are speciality items, where the expert opinion of the veterinarian will be the key element in the purchase decision, as opposed to commodity products, where the key decision driver is price. Bioniche, through its own sales representatives in Canada, the United States, Europe and Australia sells directly to the veterinarians. In other markets, the Company employs distributors with similar abilities.

Reproduction and Embryo Transfer Products

Revenues from this product segment generated \$19.2 million in the fiscal year 2004. The Company made two important acquisitions in 2004: the assets of AB Technology, Inc. and the Cue-Mate® device.

The recent acquisition of the assets of AB Technology Inc. has expanded the Company’s reproductive product portfolio and allows it to provide further convenience to its customers. The ViGro™ media product line is manufactured at the Company’s Pullman facility which has FDA approval. Since the acquisition, the Company has expanded the regions where these products can be purchased. As well, additional dossiers are being created to obtain registration in expanded geographic markets for Folltropin®-V, Lutropin®-V, Pregnecol™ and Cue-Mate® products. The Company’s innovative protocol of Lutropin-V and Pregnecol (known as AI Synch™) used to synchronize estrus and ovulation in swine can increase pregnancy and farrowing rates. This protocol allows timing of ovulation to be accurately predicted, removing the guesswork associated with timing of insemination.

The Company distributes these products itself in Canada, the United States, Ireland and Australia, and through distributors in New Zealand, South America, South Africa and China.

Hyaluronan

With products such as *Enhance*® and *Hyalovet*®™ for intraarticular use and *MAP*®-5 for cryopreservation of embryos, Bioniche Animal Health has been a major supplier of hyaluronan products to veterinarians for nineteen years

Enhance® is distributed by the Company directly in Australia. *Hyalovet* is sold by the Company directly, in Canada only. *Map 5* is sold by the Company on a world-wide basis.

Immunostimulants

The Company will continue to expand into new indications with a new manufacturing process which ensures that no product of animal origin is used in the growth media or in the processing of the finished product.

Settle and *Immunoboost* are sold by the Company directly in the United States. *Regressin* is sold by the Company directly in the United States and Canada, while *Equimune* is sold by the Company in the United States, Australia and through a distributor in Argentina.

Canada

The Canadian animal health market continued to be negatively impacted by the imposition of trade restrictions on the sale of live cattle to the United States caused by BSE (Bovine Spongiform Encephalopathy) through the 2005 fiscal year. In fiscal 2005 the cattle product sector for the Company will incur additional challenges as the Company loses its marketing rights to the *CIDR* device as a result of Pfizer's acquisition of Pharmacia. This product was originally registered in Canada by the Company and marketed under a distribution agreement with Pharmacia.

The Company has responded with several activities to increase business. (i) There has been exciting progress with towards timed breeding in swine using the Company's products *Pregneco*™ and *Lutropin*® V. Both of these products are licensed in Canada and are capable of generating significant revenues in the future. (ii) The acquisition of *Cue-mate*®, a competitor to the *CIDR* device, will add future revenue following registration in Canada. (iii) The purchase of AB Technologies (embryo transfer media and equipment) has immediately increased the number of products the Company can offer to embryo transfer veterinarians in addition to *Folltropin*®-V. The focus on such core technologies, where the Company manufactures, registers and markets the products, is expected to create a strong foundation for future growth.

The Company distributes these products directly in Canada.

United States

The United States animal health market is the largest and most lucrative single market in the world. In 2001, sales in the United States of all animal health products, with the exception of nutritional feed additives, exceeded \$4.3 billion USD. Many well-established distribution companies with varying specializations operate in the market, but demand for these services is falling as the larger multinational manufacturers are moving towards selling their products directly to producers in order to save costs. The Company, with a track record of negotiating distributor agreements tailored to specific requirements, has the potential to benefit from this trend as distributors seek to replace the business lost from the larger companies. Some distributors are also aggressively developing brand identity with their own labels. The Company is pursuing relationships with these companies as they have the potential to provide a motivated sales and marketing force with an existing presence in the market. The Company will continue to use a small but experienced sales force to support its distribution network. This has proved to be an effective

approach to specific markets such as those for equine therapeutics and bovine and equine reproduction. To reach broader markets the Company will expand its sales force or select partners with existing infrastructure.

The Company's current United States product line includes the following nine major product lines, all of which have significant market potential: (i) *Immunoboost*®, the immune stimulant for the treatment of colibacillosis in neo-natal calves; (ii) *MAP*®-5, the hyaluronan product for use as a cryopreservative for embryo transfer; (iii) *Folltropin-V*, the leading brand of follicle stimulating hormone for use in the highly specialized bovine embryo transfer industry; (iv) full line of embryo transfer media and equipment from AB Technology; (v) *Equimune*®, the immune stimulant for the treatment of respiratory infections in horses; (vi) *Regressin*®, a treatment for cancers in small animals; (vii) *Colimune*®, a polyclonal antibody product for the prevention of K99 *E. coli*; (viii) the *EPIC* line of equine nutritional supplements; and (ix) *Settle*™ for the treatment of equine endometritis.

The Company distributes these products directly in the United States.

Europe

To facilitate entry into the European Union, the Company has maintained a presence in the Republic of Ireland. Bioniche Animal Health (Europe) Ltd. will be the launch pad for the reproductive and immune stimulant technology into the European Union following regulatory approvals. Key management personnel, warehouse facilities, distribution channels and market contacts are in place to support the expansion plans for these market segments. Sales have been growing with the re-introduction of *Folltropin*®-V and further expansion and registrations into additional European countries using the mutual recognition pathway.

Bioniche Animal Health is developing sales of *Folltropin*®-V and the *ViGro*™ media line in China. Demand for meat and dairy products in China is increasing and the use of embryo transfer to increase the quality and productivity of the beef and dairy herds will increase accordingly. Management believes that in the future China will be an important market for animal health products.

Australia

Bioniche Animal Health A/Asia is a manufacturing facility for *Pregnecol*™ and *Ova-Gest*® as well as a distribution centre for the Company's products in Australia and New Zealand. The Company has a large stable of products available for sale including *Folltropin*®-V, *Pregnecol*™, *Ova-Gest* and *ViGro*™ media and other embryo transfer products for the reproduction market as well as *Enhance*®, *Equimune*® and *BC2A*® for the equine market. In 2004 the Company acquired the intellectual property and other assets of the *Cue-Mate*® business, an innovative livestock reproductive technology.

The Company distributes these products directly in Australia

Export Markets

The Company exports approximately \$2 million of products throughout South America, the Middle East and Asia every year, through a network of distributors.

	THERAPEUTIC AREA	CATEGORY	MARKETS APPROVED IN
Follitropin-V	Embryo Transfer	Drug	Canada, New Zealand, Australia, Brazil, Argentina, Ireland
Lutropin-V	Reproduction	Drug	Canada
MAP - 5	Embryo Transfer	Cryopreservative	Worldwide
Coliume-Oral	Enteritis	Biologic	Canada, USA
Pregnecol	Reproduction	Drug	Canada, Australia, Ireland New Zealand, Isreal
MCWE:			
Settle	Anti-bacterial	Biologic	USA
Equimune IV	Anti-viral - Equine	Biologic	USA, Australia, New Zealand, Ireland
Regression	Cancer	Biologic	Canada, USA
Immunoboost	Anti-bacterial	Biologic	USA
* (Not a complete list. Only major products have been listed here. Animal product portfolio comprises over 45 veterinary products, for cattle, swine horses and companion animals)			

Market Analysis

The global animal health market is currently valued at approximately \$20.5 billion per year. Management believes that the growth of products for dogs and cats has been the principal cause of this growth, at almost twice the rate of products for the livestock food-producing sector, which has been static. Management believes that health expenditures on companion animals will continue to increase, as consumers become interested in high value treatments, such as cancer treatments, and as pets are increasingly considered members of the family.

In the livestock sector, management believes the indiscriminate use and abuse of antibiotics, combined with antibiotic resistance concerns in human medicine, will create opportunities for alternative therapies.

Major animal health product manufacturers continue to seek acquisitions and licensing opportunities in an attempt to overcome increasing competition and to build shareholder value. Additionally, as large pharmaceutical companies' research and development is focused on the human health markets, the veterinary divisions of these companies are entering into joint ventures with small research or biotechnology companies to secure access to new products.

Management believes that the Company is in a position to benefit in a number of ways from this rationalization. Significant market niches (livestock reproduction) will likely be of decreasing interest to multinational companies and the number of technologies being pursued by large companies should also decline as they focus only on those with high volume potential. Mergers have also made available a large pool of competent, experienced manpower. As multinationals concentrate on their strengths, opportunities arise for smaller firms to acquire non-strategic products. The Company's acquisition of *Cue-Mate*® from Pfizer is an example.

Management believes that the agricultural sector itself is also rationalizing in the developed world, the result of which will be fewer but larger farms. This will exert considerable pressure on commodity pharmaceuticals. However, the Company is unlikely to be affected by this trend as its products are essentially speciality technologies where performance is the customer's priority.

Concern over environmental issues has increased. Consumers and activist groups now have greater access to information than ever before and are increasingly vocal about the possibility of

antibacterial or chemical residues in foods and their possible long-term effects on human health. This, in turn, has caused governments to implement more stringent regulatory requirements relating to the introduction of new products, even when such products may have been previously demonstrated to be free of adverse effects and readily available in neighbouring countries without apparent cause for concern. These developments and trends present opportunities in the global market for the Company, as one of its fundamental business objectives is the prevention of disease through immunomodulation rather than through antibiotic or chemical therapeutic agents.

Mycobacterial Cell Wall products from *M. phlei* (MCWE/MCC) are currently undergoing preliminary evaluation for their ability to reduce antibiotic reliance and promote enhanced growth in food producing animals.

Geographically, the global market is comprised of North America, which represents approximately 30% of the world market, the European Union, which represents 22% and is the most tightly regulated despite being not yet unified, and the Asian/Latin American markets.

Competition

In Canada, the competitive environment continues to change through industry consolidation, especially with the Pfizer purchase of Pharmacia. While certain market segments, namely the embryo transfer sector, continues to grow, the BSE issue has significantly decreased the value of health products used in the bovine sector. The re-opening of the border with the United States for live cattle which occurred in July, 2005 should contribute to improved sales of the Company's bovine products in the months ahead.

The global markets for Animal Health products are being rationalized by large pharmaceutical companies, thereby providing opportunities for Bioniche Animal Health to acquire or develop products that would not meet the higher revenue generation potential required by the larger competitors. Examples are the acquisition of *Cue-mate*® from Pfizer and the acquisition of AB Technology.

The Company is committed to a strategy of reliance on well-differentiated, technology-based products as the backbone of its product line, which is promoted to veterinarians by its own sales force in Canada, the United States, Australia and Ireland and through distributors in other areas of the world. In addition to its own product offerings to veterinarians, the Company distributes products from companies whose products are well-researched and offer a marketable competitive advantage.

Regulatory Environment

The development of animal health products requires approval by various government authorities, depending on whether the product is a pharmaceutical, biologic or feed, and on the jurisdiction in which approval is required.

Canada

In Canada, the Company develops and markets two main types of animal health products - biologics and drugs. Biologics are regulated by the Veterinary Biologics Section (VBS) of the Canadian Food Inspection Agency (CFIA) pursuant to the *Health of Animals Act* and the regulations thereunder. Drugs are regulated by both the Veterinary Drugs Directorate (VDD), a division of the Health Products and Food Branch of Health Canada (HPFB) and the Health Products and Food Branch Inspectorate (another division of the HPFB) pursuant to the *Food and Drugs Act* and the regulations thereunder.

In order to grant a license to market a veterinary biologic in Canada, the VBS must be provided with a complete submission, which includes intensive characterization of the starting materials, evidence of control over the manufacturing process, evidence of safety and efficacy of the product in the target animal, results of quality control tests of the final product and stability of the final product. The facilities used for manufacturing and testing must also be licensed and a fee is charged by the VBS for its review of the product and the facility. The timeframe for an approved submission could range from six to twenty-four months. Review of biologics applications and annual licensing fees are under cost recovery programs and the cost of annual maintenance to the Company is approximately \$5,000 for its current line of biologics. Currently, there is no specific requirement for compliance with current Good Manufacturing Practices (cGMP) for veterinary biologics, however, the trend in recent years is toward cGMP compliance by manufacturers and it is expected that such a regulation will be in effect within the next two to three years.

The product development and approval process for new animal drugs in Canada is similar to the requirements for human drugs, with the exception that the submission review is performed by the Veterinary Drugs Directorate (VDD) rather than the Therapeutic Products Directorate (TPD) since the VDD reviewers have specific experience in animal drugs. An Investigational New Drug (IND) submission is required before clinical trials can begin. The IND submission must establish the chemical characterization of the product, its manufacturing process and the safety in non-target animal species (laboratory animals). Following approval of the IND submission, target animal safety and efficacy studies can be completed. An additional requirement for veterinary drugs is the assessment of human safety if the drug is to be given to food-producing animals. Following successful review of a New Drug Submission, a Notice of Compliance will be issued, as well as a Drug Identification Number (“DIN”).

The cost of review of veterinary drug submissions can range from \$5,000 to \$70,000 depending on whether it is a new or old drug and if the product is intended for a food producing animal or not. In addition to the product approval process for new drugs, annual maintenance fees are required to maintain the facility license and the DINs. Government audits are carried out on all drug manufacturers to ensure compliance with GMP.

United States

In the United States, governmental regulation of animal health products is primarily split between two agencies, the United States Department of Agriculture (USDA) and the Food and Drug Administration (FDA). Vaccines for animals are considered veterinary biologics and are regulated by the Center for Veterinary Biologics (CVB) of the USDA under the auspices of the *Virus-Serum-Toxin Act*. Alternatively, animal drugs, which generally include all synthetic compounds, are approved and monitored by the Center for Veterinary Medicine (CVM) of the FDA under the auspices of the *Federal Food, Drug and Cosmetic Act*.

Most of the regulated products presently sold or under development by the Company are, or will be, regulated by the USDA. The purpose of the *Virus-Serum-Toxin Act* is to ensure that veterinary biologics sold in the United States are safe and efficacious. Pre-market testing is performed by the manufacturer and the CVB prior to approval of the product for sale, as well as on each new lot. Although the procedures for licensing products by the USDA are formalized, the acceptable standards of performance for any product are agreed upon between the manufacturer and the CVB. For novel products that are unlike others already licensed, the agreement on expected performance standards is typically reached through a dialogue between the CVB and the manufacturer. The formal demonstration of acceptable efficacy of the product is done in carefully controlled laboratory trials. This is normally a much faster process than demonstration of efficacy in clinical trials using client-owned animals.

cGMP requirements for animal drugs are the same as those for human drugs and, therefore, strict quality assurance and quality control procedures must be adhered to during the processing of animal drugs. The drug development process for human therapeutics is much more involved than that for animal drugs. The entire process for human therapeutics from research to market introduction may take as long as 20 years and cost tens to hundreds of millions of dollars. (See Human Health Divisions – Regulatory Environment). By contrast, management estimates that it can take up to 11 years and \$5 million USD to develop a new drug for animals, from commencement of research to market introduction. Approximately three years of this is spent in the clinical trial and review process. This time requirement for animal drugs is significantly shorter than the analogous time requirement for human drugs, in part, because clinical trials may be conducted immediately in the animal for which the drug is intended. Also, for animal drugs, unlike human drugs, advantages over existing therapies do not have to be demonstrated. In addition, with the enactment of the *Animal Drug Availability Act* (ADA) in October, 1996, substantial reductions in the time and cost to license some new animal drugs by the FDA are anticipated (although two to three years is usual). The ADA was designed to streamline the animal drug approval process in order to provide more registered drugs for animal use. The ADA mandates a binding pre-submission conference, at which the CVM and the applicant agree on the types of data the FDA will require. The ADA also removes the requirement that field investigations be done in every instance and allows the CVM to accept different types of proof of a drug's safety and efficacy.

Regulations governing the export of drugs and biologics have also been relaxed by the passage of the *Export Reform Enhancement Act* of 1996. Under this Act, drugs and biologics produced in the United States do not have to be licensed for sale in the United States before export if they are approved for sale in the importing country.

European Union

European Union requirements for approval of animal drugs are similar to Canadian and U.S. requirements. Clinical trials must be carried out to establish safety and efficacy in the target animal and safety in humans if the target animal is food-producing. The product and its starting materials must be adequately characterized and tested, and the facilities where they are manufactured must comply with GMP.

In the European Union, the requirements for animal biologics are similar to those for drugs in that GMP must be adhered to throughout the manufacturing process, and safety and efficacy must be established. Adequate characterization of starting materials is essential, as there are safety concerns with products of biological origin.

FOOD SAFETY DIVISION

The Food Safety division of the Company was established in July, 2001. The division is responsible for researching, developing, manufacturing and marketing veterinary biopharmaceutical products to improve the safety of food and water supplies worldwide. The leading initiative for this division is the development and commercialization of a new cattle vaccine for the prevention of the spread of the deadly *E. coli* O157:H7 bacteria. This vaccine is designed to reduce the burden of the pathogenic bacterium *E. coli* O157:H7 in cattle and their manure, thereby reducing contamination into the environment, ground water and in cattle processing plants. The vaccine has also proven to reduce the number of animals in which the bacteria can colonize. The fewer of the bacteria reproducing in the cow, the fewer bacteria will be shed in its manure.

The Company is also researching other products in the food and water safety field.

Product Development Candidates

E. coli O157:H7 Cattle Vaccine

Escherichia coli (*E. coli*) bacteria are normal organisms found in the intestinal track of all animals. Most *E. coli* are non-pathogenic to their host, however certain types cause digestive disturbances and, occasionally, other significant systemic disease. *E. coli* O157:H7 bacteria cause significant disease in humans and are most often associated with consumption of contaminated food or water. Ruminant livestock (e.g. cattle) are considered the major reservoir of *E. coli* O157:H7 worldwide. Numerous studies have demonstrated that the incidence of *E. coli* O157:H7 in beef and dairy cattle is widespread and that the organism is found in, on, and around cattle in all parts of the world. Use of manure as fertilizer for crop production and run-off from beef and dairy cattle operations are a source of contamination for the general environment, as well as surface and ground water. *E. coli* O157:H7 contamination of food and water as a result of fecal shedding by livestock is a well-recognized and documented threat to human health.

The economic impact of this disease is thought to be considerable. A number of large-scale recalls of hamburger meat have occurred as a result of *E. coli* contamination. Since January, 2000, more than 20 million pounds of beef have been recalled in North America. The Centres for Disease Control estimates that *E. coli* O157:H7 infection affects some 70,000 people per year in the United States, and that 5,000 of those people develop Haemolytic Uremic Syndrome (HUS), a disease characterized by kidney failure. Five percent (250) of HUS patients die, many of them children and senior citizens, whose kidneys are more sensitive to damage. The annual cost in the United States is estimated at more than \$650 million due to medical expenses, lost productivity and death. In addition to the direct human costs due to *E. coli* O157:H7 infection, cattle and dairy producers, meat packers and dairy processors, meat and milk distributors and wholesale and retail food outlets all incur direct and indirect (reduced demand for their product) costs associated with this foodborne disease threat. The cost of *E. coli* O157:H7 to the food industry as a result of recalls, destroyed food, control measures and lost demand due to loss of consumer confidence is estimated to be in the billions of dollars (\$2.7 billion – *Meat & Poultry*, February, 2003) in the United States alone.

The Company's *E. coli* O157:H7 vaccine has been developed by a strategic alliance formed in September, 2000 and composed of the University of British Columbia (UBC), the Alberta Research Council, the University of Saskatchewan's Vaccine & Infectious Disease Organization (VIDO), and Bioniche, which holds the rights to worldwide commercialization of the vaccine. During the last three years, important contributions in efficacy evaluation have been made by the University of Nebraska-Lincoln, led by Drs. Rod Moxley and David Smith. These studies have shown that the vaccine, under field conditions, performs very well and effectively contributes to a reduction in cross-contamination in meat processing plants, due to its effectiveness in reducing shedding and colonization of *E. coli* O157:H7 in cattle.

The Company is now developing manufacturing sources and capabilities to prepare for commercial manufacture of the vaccine for the North American market.

Research and Development

The original research in connection with the *E. coli* O157:H7 vaccine was performed by Dr. Brett Finley at the University of British Columbia and Dr. Andrew Potter at Vaccine & Infectious Disease Organization (VIDO). The Company became involved after the proof of concept had been established, and in conjunction with Alberta Research Council, performed the development work on the vaccine. The Company has entered into various agreements with researchers to conduct studies to be used for regulatory purposes in connection with the *E. coli* O157:H7 vaccine.

The Company, in partnership with the Vaccine & Infectious Disease Organization (VIDO) at the University of Saskatchewan and the Natural Science and Engineering Research Canada, has sponsored two research positions - *Natural Science and Engineering Research Canada (NSERC)/Bioniche Industrial Research Chairs* - in vaccines to reduce food and water contamination. Dr. Andy Potter (Senior Chair) and Dr. Wolfgang Köster (Associate Chair) have been appointed to these positions. The Research Chairs were established to undertake research leading to the development of additional food safety vaccines to fight infectious diseases of animals, including *Salmonella enteritidis*, *Campylobacter jejuni*, and *Cryptosporidium parvum*. These three animal-to-human-transmitted pathogens cause illnesses that can be serious and, in some cases, fatal. *Salmonella* can lead to reactive arthritis and serious infections; and *Campylobacter* may be the most common precipitating factor for Guillain-Barre syndrome, according to the Partnership for Food Safety Education.

PRODUCT	THERAPEUTIC AREA	CATEGORY	RESEARCH	PROOF OF CONCEPT TRIALS	REGULATORY TRIALS
<i>E. coli</i> O157:H7	Food Safety	Vaccine	██████████	██████████	██████████
Food Safety Chair Products					
Salmonella enteritidis	Food Safety	Vaccine	████		
Campylobacter jejuni	Food Safety	Vaccine	████		
Cryptosporidium parvum	Food Safety	Vaccine	████		

Sales and Marketing

In typical animal health marketing, the decision-maker about whether to purchase the product is the owner or producer of the livestock. In food safety marketing, the decision is made by a combination of influencers, from the slaughter house to the retail and fast food outlets, as well as by producers.

The Company intends to market the *E. coli* O157:H7 vaccine to the meat production chain, including producers, feedlots, processors, and the wholesale to retail meat trade. As further food safety vaccines are developed, they will be added to this product line.

The Company continues to move forward in its program to register the *E. coli* O157:H7 vaccine in Canada and the United States. The Company has previously released positive research results relating to the vaccine, demonstrating that feedlot cattle vaccinated with the vaccine showed a significant reduction of the deadly bacteria in their manure. The most recent efficacy trials have been completed by Drs. Moxley and Smith from the University of Nebraska–Lincoln, where they tested the efficacy of the vaccine during the backgrounding and feedlot stages of beef production. Two of the three studies showed a reduction in colonization of the bacteria in the terminal rectal junction of the cattle following vaccination. This is significant because it has been shown that *E. coli* O157:H7 colonize in extremely high numbers in this area, therefore, a reduction in the number of bacteria colonizing there will result in a decreased number of bacteria being shed into environment. Additionally, this vaccine is effective in reducing the number of animals shedding the bacteria in their manure, as evidenced by the third study.

More than 27,000 cattle have now been enrolled in the clinical program over the course of three years of study. This is an unprecedented level of testing for an animal vaccine. Consistently positive results are being seen in feedlot settings, where the *E. coli* O157:H7 bacteria are prevalent, and where the Company will first market the vaccine upon licensing.

Regulatory submissions are being prepared for both the Canadian Food Inspection Agency (CFIA) and the United States Department of Agriculture (USDA) as part of the regulatory process and the Company expects to file the U.S. submission in the late second quarter or early third quarter of fiscal 2006. To satisfy regulatory requests, additional safety studies are being performed in both Canada and the

U.S. The U.S. study relates to the safety of the animals upon vaccination, while the Canadian study will focus on the safety of the individual performing the injection (to analyze the possible health effects of accidental injection, as requested by the CFIA).

As this product follows the typical animal health pathway to producers, the Company will be positioned to handle distribution through its current marketing and sales forces in the United States and Canada, and will seek a strategic alliance with a commercial partner for Europe. In addition, once regulatory approval is imminent, the Company will appoint a team of experts, consisting of food safety specialists, veterinarians, and epidemiologists coordinated by a business manager to “sell” the benefits to the key decision-makers. This team will also be involved with field demonstrations to prove the benefit of the vaccine to potential users. It is the intention of the Company to introduce and manage the supply of the *E. coli* O157:H7 vaccine in North America and to consider partners in other parts of the world. In fiscal 2005, the Company had preliminary discussions with meat processors in the U.S. and Canada, and management expects the vaccine, once launched, will be widely adopted.

Competition

E. coli O157:H7 infection and its treatment are attracting significant attention, and competitive vaccines or other solutions for this problem may be developed and commercialized by other companies in the veterinary health market. The competition could come from other drug treatments for the animals, non-drug treatments for the animals, changes in treating water for human consumption, or from process changes in meat handling. There are other vaccines under development, but the stage of development is early. Currently, there is no licensed therapy for *E. coli* O157:H7, but other pre-harvest solutions may include:

- antibiotics, which in today’s regulatory environment are less acceptable;
- feed additives, such as probiotics, which are being tested, but so far show variable effectiveness;
- vaccination with the Company’s *E. coli* O157:H7 antigens, which has demonstrated significant reduction of shedding into the environment and colonization in the cow.

Regulatory Environment

The development of food and water safety products by the Company requires approval by various government authorities, depending on the claims the Company wishes to make about these products. The typical products which the Company is developing, including the *E. coli* O157:H7 vaccine, will be used to reduce infection of a food-producing animal with a bacteria which is pathogenic to humans, but may not be harmful to the host animal. These products will be regulated as Veterinary Biologics and, therefore, fall under the jurisdiction of the Canadian Food Inspection Agency’s Veterinary Biologics Section. The jurisdiction of the *E. coli* O157:H7 vaccine in the United States is with the United States Department of Agriculture (USDA).

Water safety claims will be governed by the Environmental Protection Agency in the United States and the Ministry of Environment in Canada.

DISPOSITION OF BIONICHE PHARMA GROUP LIMITED

As previously noted, the Company has decided to realign its operations in order to enhance the corporate focus on key strategic priorities and to improve near-term financial performance. This decision

involves the disposal of the Company's sterile injectibles business, Bioniche Pharma Group Limited. The Company currently owns 65.36 percent of that business on a fully diluted basis.

The Company made this decision for several reasons. At this point in its development, Bioniche Pharma requires continued investment to reach its full potential. The Company is not prepared to commit ongoing resources to the Pharma business while maturing its very high potential key strategic priorities: the Phase III clinical trial with Mycobacterial Cell Wall-DNA Complex (MCC) for bladder cancer and the licensing of the *E. coli* O157:H7 vaccine for cattle.

The revenue generated by the sale of this asset will allow the Company to significantly reduce its debt load, while it focuses on opportunities in the development, licensing and marketing of its own products, which offer greater opportunities than non-branded sterile injectable pharmaceuticals (the focus of Bioniche Pharma).

Bioniche Pharma Group Limited is a specialty pharmaceutical company involved primarily in the development, manufacturing and marketing of sterile injectable products. It sells a number of non-branded products in the U.S. primary care and hospital markets. It also holds the rights to Bioniche Life Sciences Inc.'s proprietary product, *Suplasyn*®, which it sells in 30 countries globally. In addition, Bioniche Pharma acts as a contract manufacturer for pharmaceutical companies, and it manufactures products for Bioniche Therapeutics and Bioniche Animal Health that are sold in the United States, Europe and Canada.

Subsidiary	Jurisdiction of Incorporation	Percentage of Voting Securities Owned Directly or Indirectly by the Company	Percentage of Non-Voting Securities Owned Directly or Indirectly by the Company
Bioniche Pharma (Canada) Limited	Canada	95% ⁽¹⁾	N/A
Bioniche Pharma USA, Inc.	Delaware	95% ⁽¹⁾	N/A
Bioniche Pharma Group Limited	Ireland	95% ⁽¹⁾	100% ⁽¹⁾
Bioniche Teoranta	Ireland	93% ⁽¹⁾⁽²⁾	77% ⁽¹⁾

Notes:

(1) - ICC Equity Partners Limited invested IR£3.5 million in Bioniche Pharma Group Limited in the form of a convertible loan which bears interest at 6% per annum. ICC's interest is convertible into approximately 31% of the voting shares of Bioniche Pharma Group Limited on a fully diluted basis. Management of Bioniche Pharma Group Limited owns 5% of the voting shares of Bioniche Pharma Group Limited. Bioniche Life Sciences Inc. owns the balance of the voting shares of Bioniche Pharma Group Limited and 3,000,000 non-voting preferred shares.

(2) The Irish Government owns 2.5% of the shares of Bioniche Teoranta.

The sales, marketing and business development activities of Bioniche Pharma Group Limited are largely handled through Bioniche Pharma (Canada) Limited, the Company's subsidiary located in Montréal, Québec, and by its representative office in Geneva, Switzerland. Bioniche Pharma USA Inc. was incorporated in June, 2002 to handle sales, marketing and business development operations for the United States market. The Company has negotiated distribution agreements with various pharmaceutical companies worldwide for the marketing and sales of *Suplasyn*.

Bioniche Teoranta is the Irish manufacturing subsidiary of Bioniche Pharma Group Limited, and operates a GMP compliant facility located in County Galway, Ireland. The facility consists of 20,000 square feet of manufacturing and a second 15,000 square foot facility comprising packaging, warehousing and office space. The Company recently announced the construction of a new cGMP manufacturing facility at its Irish site to accommodate its business requirements. The expansion will provide an additional 25,000 square feet of manufacturing space (for a total of 45,000 sq. ft.) and is expected to be completed and validated by the end of calendar 2005. The expansion has been financed by a loan from the Bank of Ireland of up to 8.2 million Euro, (together with additional facilities of up to 2.5 million Euro to be used for currency hedging and in terest rate swaps in connection with this loan). In connection with this expansion, Údarás Na Gaeltachta, an Irish development corporation, has provided grant aid totaling 1.9 million Euro and added to its existing equity investment in Bioniche Teoranta by purchasing 700,000 Euro of preferred shares. This expansion will increase the Company's manufacturing capacity, improve efficiencies and facilitate growth of the Company's product development capabilities.

Bioniche Teoranta has received the necessary approvals from the regulatory authorities in all its major markets including Europe, Canada and the United States to manufacture and sell sterile injectable products manufactured to GMP standards to such markets. Bioniche Teoranta's GMP status is an essential part of Bioniche Pharma's worldwide manufacturing and marketing strategies.

Total revenues from sales of products by Bioniche Pharma Group Limited were \$18.2 million for 2005 and \$24.6 million for 2004.

Products

Sterile Injectables

Bioniche Pharma develops, manufactures and markets sterile injectable pharmaceuticals with a primary focus on the primary care and hospital markets in the United States. The Company's product development focus is on Abbreviated New Drug Applications (ANDAs) for the United States market. During the last few years, the Company has obtained a total of twelve ANDAs. In addition, the Company has additional ANDAs pending and an active portfolio of products in development.

Bioniche Pharma has received ANDA approval in the United States on the following sterile injectable preparations, which it has either commenced marketing or is in the process of launching into the United States market:

PRODUCT	DATE APPROVED
Ketamine HCL 50mg/mL	December 28, 2001
Ketamine HCL 100mg/mL	October 31, 2002
Edetate Disodium 150mg/mL	July 9, 2002
Amiodarone 50mg/mL	October 15, 2002
Promthazine HCL 25mg/mL	November 21, 2002
Dimethyl Sulfoxide Irrigation 50% w/w	November 29, 2002
Milrione Lactate	June 16, 2003
Mesna	December 17, 2003 – Tentative Approval
Cyanocbalomine	September 23, 2003
Sotradecol 1%	November 12, 2004
Sotradecol 3%	November 12, 2004
Diphenhydramine	July 12, 2005

Suplasyn®

Suplasyn® is a hyaluronan agent for the management of osteoarthritis. *Suplasyn* is used as a replacement for synovial fluid, the naturally occurring lubricant in articular joints such as the knee and elbow. Osteoarthritis is associated with synovial fluid degradation, the result being a loss of lubricant effect and considerable pain. Administration of *Suplasyn* into affected joints replaces and augments the natural supply of synovial fluid. Intra-articular hyaluronic acid therapy is widely accepted in Europe, Asia, and Canada as an effective treatment for osteoarthritis. It is anticipated that this therapy will continue to grow globally.

Registered for use in Canada, in the European Union, and in other jurisdictions, *Suplasyn*® competes in the international viscosupplementation market in various countries around the world. The Company's growth strategy involves the registration of the product in additional markets as well as the development of new indications based on hyaluron technology.

During fiscal 2004 the Company launched *Suplasyn*® *md* (mini-dose), a product also used in the management of osteoarthritis. *Suplasynmd* (mini-dose) was specifically developed and designed for use in small joints, such as those found in the hand and foot.

Revenues from sales of *Suplasyn* were \$9.million in 2005 and \$11.7 million for 2004.

Other Products

The Company also manufactures proprietary hyaluronan products for the Company's human and animal health divisions on a contract manufacturing basis, including *Cystistar*®, *Map*®-5 and *Enhance*®

Product Development Candidates

Bioniche Pharma's product development portfolio focuses on seeking new ANDA approvals for niche product opportunities and for products whose patent is set to expire. In addition, the Company aims to develop additional hyaluronan products to complement its existing *Suplasyn*® and *Suplasyn*®*md* (mini-dose) products.

Sales and Marketing

General

Bioniche Pharma's sales are derived primarily from three sources:

- (1) Sales of *Suplasyn*® through its international distributor network;
- (2) Sales of both branded and non-branded products in the United States; and
- (3) Manufacture of products for the Company's human and animal health divisions on a contract manufacturing basis.

In the next twelve months, sales growth is forecasted to be derived primarily from the introduction of *Sotradecol*® (1% and 3%) in the United States market. In addition, moderate growth is expected from *Suplasyn*® and its other existing products.

Suplasyn®

The Company has entered into exclusive distribution agreements with various pharmaceutical companies for the distribution of *Suplasyn*® throughout the European Union, the Middle East, Asia and South America.

Market Analysis

The market for sterile injectables is primarily institution-based and may be broken down by geographic and product segments, as follows:

Geographic Segments:

For practical purposes, the injectables market may be regarded as being divided into three geographic segments: North America (the United States and Canada), the European Union and the rest of the world (including Central Europe).

Bioniche Pharma's primary market focus is on North America and the European Union. Management believes that North America represents 55% of the global market. In management's opinion, it is also by far the most challenging market from a regulatory point of view. Demand for sterile manufacturing is strong and Bioniche Pharma is well positioned to exploit a significant market opportunity.

The European market is currently about half the size of the North American market. Management estimates that there is a disproportionate lack of high quality injectable manufacturing capacity at a time when regulatory standards are being increased under European Union rules. In management's view, Bioniche Pharma may be in a position to benefit from this situation as a result of its GMP compliant plant in Ireland and its established skills in achieving regulatory clearances.

Product Segments:

The sterile injectables market may be divided into three product segments: branded injectables, speciality or proprietary injectables and non-branded (generic) injectables. Apart from *Suplasyn*®, Bioniche Pharma's target markets are primarily the non-branded and proprietary injectable markets.

Proprietary injectables are products which are still under patent protection and, thus, are sold exclusively by the patent owner or its licensees. These products generate high margins. In addition, as proprietary products come off patent at different times in different jurisdictions, opportunities may arise in individual markets for Bioniche Pharma.

Non-branded injectables are products which are no longer proprietary, in that they no longer have patent protection, but they are still considered by the pharmaceutical companies that developed them to be their 'property'. This means that their value is expected to decline following patent expiry as competition arises. The non-branded (generic) market presents significant opportunities to Bioniche Pharma because of three factors: Firstly, escalating healthcare costs in all parts of the world have focused significant attention on the need for the better management of hospital budgets. Inevitably, this has translated into pressure on the regulatory authorities to register generic products as quickly as possible. Secondly, the market is very large. The therapeutic injectables market in the United States alone was estimated to be U.S. \$20 billion in 2003. Of this, management believes that approximately 50% of the market is currently off-patent and, therefore, is available as generic product. Thirdly, the substantial capital costs and the stringent regulatory compliance demands on manufacturers are major barriers for companies wishing to enter this market. Several years of investment are required to build a facility, have it GMP approved, and develop a product line. As a result, there are relatively few companies manufacturing generic injectables.

Suplasyn®

Management estimates the Canadian viscosupplementation market to be somewhere between \$5 million and \$10 million, growing at 10% per year, the United States market to be approximately \$450 million per year, growing at 10% per year, and the European market to be approximately \$150 million, growing at 15% per year. The Company has established an extensive marketing network by entering into distribution agreements with pharmaceutical companies throughout Europe. Since its launch in Germany in mid 2000, *Suplasyn*® has become one of the leading products in that market.

Competition

Sterile Injectables

Bioniche Pharma has invested in excess of 10 million euros over the last two years in a new manufacturing facility and on regulatory and product development activities. Due to the substantial capital costs, rigorous regulatory compliance demands and continuous monitoring of manufacturing standards, sterile injectable products are technically more complex than other pharmaceutical dosage forms such as tablets and capsules. These standards pose a significant entry barrier for many companies attempting to enter the sterile injectable market.

Recently the Company has undertaken a significant additional investment in its Irish operations. In May, 2004, Bioniche Pharma received bank and other financing totalling approximately 10.7 million Euro and has completed a major upgrade to its manufacturing facilities in Ireland to accommodate future growth. The new manufacturing facilities are expected to be operational after they are validated by December, 2005, which will significantly increase production capacity.

Suplasyn®

There are a number of competitive hyaluronan based viscosupplementation products in the marketplace for the treatment of osteoarthritis (*Synvisc* manufactured by Genzyme in the United States and *Hyalgan* manufactured by Fidia in Italy). *Suplasyn*® is hyaluronan derived from the fermentation of bacteria and not from rooster comb or other animal origin. As a result, there are no material concerns regarding safety or purity. The Company has established a strong distribution network globally. This, in conjunction with the generation of additional clinical data and a growing market for viscosupplementation therapy in general, has enabled the Company, in management's view, to become a major player in this market.

Bioniche Pharma's production plant, located in County Galway, Ireland, is a 25,000 square foot ISO 9001 compliant facility, leased in September, 1988 for a term of 999 years (pending certain terms and conditions as set out in the lease agreement) by the Company's subsidiary, Bioniche Teoranta. The Irish plant employs 107 people and is dedicated to the manufacture of small volume parenterals in glass vials and syringes. Both personnel and the facility are qualified to manufacture sterile injectables in accordance with GMP acceptable to the United States, Canadian and European regulatory standards. The plant manufactures injectable drug products on a contract basis and also manufactures the Company's two proprietary products, *Cystistat*® and *Suplasyn*®, as well as products for Bioniche Animal Health, including *MAP-5*® and *Enhance*®. The Company also has a 20,000 square foot facility comprising packaging, warehouse and office space. The Company has completed an expansion of its manufacturing capabilities with the construction of a new plant comprising approximately 25,000 square feet. Validation of the new facility is underway.

INTELLECTUAL PROPERTY

The Company actively pursues a policy of seeking patent protection for its proprietary technology. The Company believes that patent and trade secret protection is important in its business, and that its success will depend, in part, on its ability to obtain and enforce strong patents, to maintain trade secret protection and to operate without infringing the proprietary rights of others. For the fiscal year 2004 to 2005, the Company had seventy-three patents issued in major jurisdictions related to its Mycobacterial Cell Wall-DNA Complex (MCC) technology, one related to its Mycobacterial Cell Wall Extract (MCWE) technology, and one related to its reproductive technology. The European Patent Office has indicated its intention to grant a patent related to the Company's oligonucleotide technology and one related to its MCWE technology.

The Company has thirty-five pending patent applications relating to MCC, MCWE, and hyaluronan technologies collectively, in selected countries worldwide, including Canada, the United States, Australia, Europe and Japan. Additionally, there are sixty six pending patent applications relating to oligonucleotides, six relating to botanicals and five relating to reproductive technologies (five).

Technology	Number of Patent Applications Pending	Number of Patents Issued or in EP Validation Stage	Total Number of Patents and Applications per Technology
MCC	21	106	127
MCWE	7	28	35
Oligonucleotides	66	0	66
Hyaluronan	5	50	55
Botanical	7	0	7
Reproductive	5	8	13
Antiviral	12	0	12
Total No.	123	192	315

There can be no assurance that pending patent applications will be allowed, that the Company will develop additional proprietary products that are patentable, that issued patents will provide the Company with any competitive advantage or will not be challenged by any third parties, or that patents of others will not have an adverse effect on the ability of the Company to do business.

Furthermore, there can be no assurance that others will not independently develop similar products, duplicate any of the Company's products, or design around the products patented or held in trade secret by the Company. In addition, the Company may be required to obtain licenses under patents or other proprietary rights of third parties. No assurance can be given that any licenses required under such patents or proprietary rights will be available on terms acceptable to the Company. If the Company does not obtain such licenses, it could encounter delays in introducing one or more of its products to the market, while it attempts to design around such patents, or it could find that the development, manufacturing or sale of products requiring such licenses could be foreclosed. In addition, the Company could incur substantial costs in defending itself in suits brought against it on such patents or in suits in which it attempts to enforce its own patents against other parties.

Until such time, if ever, that patent applications are filed, the ability of the Company to maintain the confidentiality of its technology may be crucial to its ultimate possible commercial success. It is the Company's policy to require its employees, consultants and parties to research agreements to execute confidentiality agreements with the Company. While the Company has adopted procedures designed to protect the confidentiality of its technology, no assurance can be given that such arrangements will be effective, that third parties will not gain access to the Company's trade secrets or disclose the technology, or that the Company can meaningfully protect its rights to its trade secrets.

MATERIAL CONTRACTS

On November 3, 2004, the Company entered into an agreement for an equity financing of \$10,000,000 with the Fonds de solidarite des travailleurs du Quebec and \$2,000,000 with the Fonds

d'investissement bioalimentaire, sec. The financing consisted of a private placement offering of 12,000,000 newly created Series 2 preferred shares for a subscription price of \$12,000,000.

CAPITAL STRUCTURE

The authorized capital of the Company consists of an unlimited number of common shares, and an unlimited number of preferred shares issuable in series.

The Series 1 preferred shares are redeemable by the Company at \$1,000 for each share together with dividends, if any, which have been declared but not paid. The Series 1 preferred shares are non-voting and are entitled to a fixed non-cumulative preferential dividend at the rate of 12% per annum.

The Series 2 preferred shares are convertible at the option of the holder into common shares for five years plus one day at a conversion ratio which is obtained by dividing the fully-accreted value by the applicable conversion price as follows: 23% at \$1.45; 50% at \$2.50; and 25% at \$3.75. The fully-accreted value is calculated as the aggregate subscription price of the preferred shares plus 6% per annum until the earlier of conversion or five years from the date of issuance. After the initial five-year plus one-day term, any Series 2 preferred shares outstanding are convertible at the option of the holder, into common shares at the fully accreted value divided by the average market price of the common shares less the greater of 5% or the maximum discount permitted by the Toronto Stock Exchange (subject to the issuance of a maximum of 8,910,000 common shares in the aggregate on conversion of all Series 2 preferred shares). If the trading price of the common shares exceeds \$13.50 for 60 consecutive days, the Company may require the holders to convert the preferred shares into common shares at the conversion ratio applicable on the date of conversion. The preferred shares have voting rights on the basis of the number of common shares that the holder would have if the preferred shares were converted into common shares on the date of the applicable shareholders' meeting.

MARKET FOR SECURITIES

The common shares of the Company are listed and posted for trading on The Toronto Stock Exchange under the symbol "BNC". The following chart sets out the price range and volume history from July 1, 2004 to June 30, 2005.

Month	Average High	Average Low	Average Close	Total Volume
JULY 2004	1.55	1.48	1.51	398051
AUGUST 2004	1.48	1.38	1.44	339585
SEPTEMBER 2004	1.52	1.44	1.5	484615
OCTOBER 2004	1.6	1.52	1.56	247171
NOVEMBER 2004	1.74	1.66	1.7	463302
DECEMBER 2004	1.63	1.56	1.61	294198
JANUARY 2005	1.62	1.55	1.57	256200
FEBRUARY 2005	1.51	1.45	1.48	352291
MARCH 2005	1.34	1.26	1.31	439423
APRIL 2005	1.39	1.31	1.35	344612
MAY 2005	1.31	1.23	1.28	266485

JUNE 2005	1.37	1.31	1.35	316173
TOTAL/AVERAGE	1.51	1.43	1.47	4,202,106

On November 3, 2004, the Company completed an equity financing of \$10,000,000 with the Fonds de solidarité des travailleurs du Québec and \$2,000,000 with the Fonds d'investissement bioalimentaire, sec. The financing consisted of a private placement offering of 12,000,000 newly created Series 2 preferred shares for a subscription price of \$12,000,000.

DIVIDEND POLICY AND RECORD

The Company's current intention is to reinvest its earnings to finance the growth of its business. The Company does not intend to pay dividends on its common shares in the foreseeable future. The Board of Directors of the Company will review this policy from time to time, having regard to the Company's financial condition, financial requirements and other factors considered relevant.

HUMAN RESOURCES AND FACILITIES

As of September 26, 2005, the Company had approximately 175 full-time and part-time employees. The Company's registered and head office is located at 231 Dundas Street East, P.O. Box 1570, Belleville, Ontario, K8N 5J2. It is from this location that administrative, sales and financial matters are handled. This Company-owned facility consists of a 137,000 square foot biotechnology pilot and manufacturing plant purchased from Bristol-Myers Squibb Canada Inc. in July, 1999. The Company has renovated one-third of this facility. The facility currently comprises: (i) corporate offices; (ii) a pharmaceutical production unit which is regulated by Health Canada's Health Products and Food Branch Inspectorate; (iii) two biological production units which are regulated by the Canadian Food Inspection Agency's Veterinary Biologics Section; (iv) quality control and research laboratories; (v) an animal health research and development unit; (vi) animal housing facilities, and (vii) a natural health products production unit which is regulated by Health Canada's Natural Health Products Directorate, and (viii) warehouse and distribution areas.

The Company owns a 27,000 square foot FDA-approved GMP facility in Montreal at 275 Labrosse Avenue, Pointe-Claire, Québec, H9R 1A3. In the short term, this facility will be used primarily for pilot-scale production of some of the Company's technologies. In the longer term, this facility will be the production point for global supply of MCC for bladder and other cancers. The Company has also leases 3,868 square feet of office space at 171 Place Frontenac, Pointe-Claire, Québec H9R 4Z7, which is near the manufacturing facility.

On June 3, 2005, 2005 the Company entered into a ten year lease for the facility located at 271 Labrosse Avenue, adjacent to the existing manufacturing facility. The facility is leased to the Company from Renaissance (London) Investments Inc., a company owned and controlled by Graeme McRae, the Company's Chief Executive Officer. Under the terms of the lease, the Company has the option to purchase the facility by May 31, 2006 by assuming the balance of the loan outstanding. The facility consists of 14,000 square feet and will be used for office and laboratory space, with the potential to add additional manufacturing space in the future. This facility will eventually replace the leased premises at Frontenac and the Biotechnology Research Institute. The Company has subleased a portion of this facility to a third party.

The Company owns a 39-hectare farm property outside Belleville, Ontario which is used to keep horses for *Colimune*® production and other animals for research and development purposes. In November, 2002, the Company sold its 172 hectare farm in Putnam, Ontario.

The Company's preclinical and formulation research is conducted at its leased 2,000 square foot research facility located within the Biotechnology Research Institute of the Canadian National Research Council in Montréal, Québec. The lease for these premises expires on November 30, 2005 and will be renewed. At the same time, the Company is currently investigating alternatives for the long-term. The Company's clinical trials are carried out by leading clinical investigators at major hospitals worldwide.

The Company leases a 1,250 square foot laboratory located at 119 Rowe Road, Athens, Georgia in the United States for a term ending November 20, 2006. This facility produces and distributes animal immunostimulant products to the United States, Canada, Ireland, Australia, South Africa and several South American, Central American and Middle Eastern countries. The Company also leases a 1,200 square foot office in Bogart, Georgia, terminable on 12 months' notice

In February, 2004, the Company acquired the assets of AB Technology Inc. of Pullman, Washington. This included the leased premises of 7,605 square feet of office and manufacturing space and 583 square feet of warehouse space. This lease will terminate on June 30, 2009.

The Company owns a manufacturing facility and a 300-acre farm in Armidale, Australia. The Company leases an additional 1,100 acres of farm land. The manufacturing facility specializes in the manufacture of pregnant mare serum gonadotrophin (PMSG), a reproductive hormone used to enhance fertility in livestock.

RISKS AND UNCERTAINTIES

Early Stage Development

Several of the Company's products or processes are at an early stage of development. Significant additional investment in research and development and clinical trials of such product and process candidates is required prior to commercialization. A commitment of substantial time and resources is required to conduct research and clinical trials if the Company is to complete the development of any product or process. It is not known whether any of these product or process candidates will meet applicable health regulatory standards and obtain required regulatory approvals, whether such products or processes can be produced in commercial quantities at reasonable costs and be successfully marketed, or if the Company's investment in any such product or process candidate will be recovered through sales or royalties.

Cash Flow, Additional Financing Requirements and Access to Capital

In past fiscal year, the Company has experienced increased losses and decreases in working capital and cash balances. At the Company's current burn rate, it is expected to consume existing cash balances by the end of the second quarter of 2006. As well, certain amounts of the Company's long term debt have been reclassified as current. In the coming year, the Company will require cash to fund future operations. The Company is dependent upon the future support of its lenders regarding compliance with financial covenants.

The Company will require substantial additional funds for further research and development, planned clinical trials, regulatory approvals, establishment of pilot-scale manufacturing capabilities and the marketing of its products. The Company believes that it will be able to obtain long-term capital to support its corporate objectives. The Company is currently pursuing many opportunities to raise financial resources, including the sale of Bioniche Pharma Group Limited, long-term debt and equity financings, and the collection of receivables available under government financing programs. However, it is impossible to guarantee the availability of additional financial resources or that these will be available

under acceptable conditions. In the event that there is an inability to raise sufficient capital, the Company will be required to rationalize its spending programs.

Please see the Management Discussion and Analysis contained in the Company's Annual Report for 2005 for further discussion of these risks.

Currency Risk

The Company is also exposed to currency risks as a result of the export of products manufactured in Canada and Europe, the majority of which are denominated in U.S. dollars.

Government Regulations

The manufacture and sale of animal and human therapeutic products is governed by numerous statutes and regulations in the United States, Canada, Ireland, and other countries where the Company intends to market its products. The subject matter of such legislation includes approval of manufacturing facilities, controlled research and testing procedures, review and approval of manufacturing, pre-clinical, and clinical data prior to marketing approval, adherence to GMP during production and storage, and regulation of marketing activities, notably advertising and labeling.

The Company's products and processes will require significant development, pre-clinical and clinical testing, and investment of significant funds prior to their commercialization. There can be no assurance that any such products will actually be developed. The process of completing clinical testing and obtaining required approvals is likely to take several years and require the expenditure of substantial resources.

Furthermore, there can be no assurance that the regulators will not require modification to submissions, which may result in delays or failure to obtain regulatory approval. Any delay or failure to obtain regulatory approvals could adversely affect the ability of the Company to utilize its technology, thereby adversely affecting operations. Further, there can be no assurance that the Company's product candidates will prove to be safe and effective in clinical trials, nor that they will receive the requisite regulatory approval. Foreign markets, other than the United States and Canada, impose similar restrictions.

Intellectual Property Issues

The Company's success will depend in part on its ability to obtain, maintain and enforce patent rights, maintain trade secret protection and operate without infringing the proprietary rights of third parties. There can be no assurance that pending patent applications will be allowed, that the Company will develop additional proprietary products that are patentable, that issued patents will provide the Company with any competitive advantage or will not be challenged by any third parties, or that patents of others will not have an adverse effect on the ability of the Company to do business. Furthermore, there can be no assurance that others will not independently develop similar products, duplicate any of the Company's products, or design around the products patented or held in trade secret by the Company. In addition, the Company may be required to obtain licenses under patents or other proprietary rights of third parties. No assurance can be given that any licenses required under such patents or proprietary rights will be available on terms acceptable to the Company. If the Company does not obtain such licenses it could encounter delays in introducing one or more of its products to the market, while it attempts to design around such patents, or could find that the development, manufacturing or sale of products requiring such licenses could be foreclosed. Third parties may claim that the Company infringes upon their intellectual property. Any such claims, with or without merit, could materially harm its business and operating

results. The Company could incur substantial costs in defending itself in suits brought against it on such patents or in suits in which it attempts to enforce its own patents against other parties.

Until such time, if ever, that patent applications are filed, the ability of the company to maintain the confidentiality of its technology may be crucial to its ultimate possible commercial success. While the Company has adopted procedures to protect the confidentiality of its technology, no assurance can be given that such arrangements will be effective, that third parties will not gain access to the Company's trade secrets or disclose the technology, or that the Company can meaningfully protect its rights to its trade secrets.

Competition

Technological competition from pharmaceutical companies, biopharmaceutical companies and universities is intense and is expected to increase. Potential competitors of the Company have or may develop product development capabilities or financial, scientific, marketing and human resources exceeding those of the Company. Competitors may develop products before the Company develops its own products, obtain regulatory approval for such products more rapidly than the Company, or develop products which are more effective than those which the Company intends to develop. Research and development by others may render the Company's technology or products obsolete or non-competitive or produce treatments or cures superior to any therapy developed or to be developed by the Company or otherwise preferred to any therapy developed by the Company.

Dependence on Collaborative Partners, Licensors and Others

The Company's activities will require it to enter into various arrangements with corporate and academic collaborators, licensors, licensees and others for the research, development, clinical testing, manufacturing, marketing and commercialization of its products. The Company intends to attract corporate partners and enter into additional research collaborations. There can be no assurance, however, that the Company will be able to establish such additional collaborations on favourable terms, if at all, or that its current or future collaborations will be successful.

Should any collaborative partner fail to develop, manufacture, or commercialize successfully any product to which it has rights, or any partner's product to which the Company will have rights, the Company's business may be adversely affected. Failure of a collaborative partner to continue to participate in any particular program could delay or halt the development or commercialization of products generated from such program. In addition, there can be no assurance that the collaborative partners will not pursue other technologies or develop alternative products either alone or in collaboration with others, including the Company's competitors, as a means for developing treatments for the diseases targeted by the Company's programs.

Furthermore, the Company will hold licenses for certain technologies. There can be no assurance that these licenses will not be terminated, or that they will be renewed on conditions acceptable to the Company.

Status of Health Care Reimbursement

The Company's ability to successfully to market certain therapeutic products may depend in part on the extent to which reimbursement for the cost of such products and related treatments will be available from government health administration authorities, private health insurers and other organizations. Significant uncertainty exists as to whether newly approved healthcare products will qualify for reimbursement. Furthermore, challenges to the price of medical products are becoming more frequent. There can be no assurance that adequate third party coverage will be available to establish price

levels which would allow the Company to realize an acceptable return on its investment in product development.

Potential Product Liability

Pharmaceutical products involve an inherent risk of product liability claims and associated adverse publicity. Product liability insurance is costly, availability is limited and may not be on terms which would be acceptable to the Company. An inability to maintain sufficient insurance coverage on reasonable terms or otherwise protect against potential product liability claims could prevent or inhibit the commercialization of the Company's potential products. A product liability claim brought against the Company or withdrawal of a product from the market could have a material adverse effect upon the Company and its financial condition.

Key Personnel

The Company's success is also dependent upon its ability to attract and retain a highly-qualified work force, and to establish and maintain close relations with research centres. Competition is intense and the Company's success will depend, to a great extent, on its senior executives, scientific staff, and collaborators. The loss of key personnel could compromise the rhythm and success of product development.

Manufacturing Facilities

The Company relies on having properly validated, fully functioning, and sufficiently sized manufacturing facilities in which to produce its products for market. Should systems fail, or a disaster strike, the ability to produce products would be negatively affected which, in turn, would affect revenue generation. The Company does not currently have backup manufacturing capacity for some of its key products. As a result, it would be forced to turn to external manufacturers should an unexpected event as described above occur.

Volatility of Share Prices, Absence of Dividends and Fluctuation of Quarterly Results

Share prices are subject to change because of numerous different factors related to Company activity, including reports of new information, change in the Company's financial situation, the sale of shares in the market, the Company's failure to obtain results in line with the expectations of analysts, an announcement by the Company or any of its competitors concerning technological innovation, etc. During the past few years, shares of the Company, other biopharmaceutical companies, and the investment market in general have been subjected to extreme fluctuations that were unrelated to the operational results of the companies affected. There is no guarantee that the market price of Company shares will be protected from any such fluctuations in the future. The Company has not paid dividends on its common shares to date and does not expect to pay dividends in the foreseeable future. The Company's quarterly operating results have fluctuated in the past and may continue to fluctuate in the future.

DIRECTORS AND OFFICERS

The name, municipality of residence, position with the Company and principal occupation of each of the Directors and Officers of the Company as of June 30, 2005 is set out below.

Name and Municipality of Residence	Position with the Company	Principal Occupation	Director of Company since
Stanley Alkemade, DVM Arva, Ontario (4),(5),(6)	Director	President of BioMedEx, a pharmaceutical industry consulting firm.	September, 1999
Michel Bazinet, M.D. (2),(4),(6) Mount-Royal, Québec	Director	Chairman and CEO of Replicor Inc.	May 5, 2005
Cindy Benning Frankford, Ontario	Vice-President, Operations, Quality and Regulatory Affairs	Vice-President of the Company since December, 2001; previously held positions within the Company.	N/A
Albert G. Beraldo, CA Beaconsfield, Québec (6)	President and Chief Executive Officer of Bioniche Pharma and Director	President and Chief Executive Officer of Bioniche Pharma.	April, 1984
David Butts (5),(6) Sofia , Bulgaria	Director	Principal, Hayhurst, Robinson, law firm.	December, 1997
François Charette, M.D., MBA St. Lambert, Québec	Senior Vice-President and Chief Medical Officer	Senior Vice-President of the Company since July 11, 2005; previously served as General Manager and Senior Vice-President of Quintiles Canada Inc. and prior to that served as Vice-President of Scientific Affairs at Berlex Canada	N/A
Margaret Cunningham, Ph.D. Kingston, Ontario (1), (6)	Director	Associate Professor, School of Business, Queens University. Ms. Cunningham has been a professor at the School of Business, Queens University since 1989.	October 24, 2003

Name and Municipality of Residence	Position with the Company	Principal Occupation	Director of Company since
Pierre-Yves Desbiens, CA, MBA (1),(6) Montréal, Québec	Director	Vice-President, Finance and Chief Financial Officer of Chronogen Inc.	May 5, 2005
Leslie Dunlop (5) Belleville, Ontario	Vice-President, Corporate Counsel	Vice-President, Corporate Counsel since November, 2001. Lawyer; previously served as Corporate Counsel, The Quaker Oats Company of Canada Limited	N/A
Mohamed Elrafih Belleville, Ontario	Vice-President, Manufacturing Operations	Vice-President of the Company since November, 2001; previously held positions within the Company.	N/A
Gail Garland Grafton, Ontario	Vice-President, Business Development	Vice-President of the Company since October, 2003; previously held a Senior Sales and Management position with Johnson and Johnson & Alcon Laboratories Inc.	N/A
Hy Isenbaum, FCA Toronto, Ontario (1),(2),(3),(6)	Chairman and Director	Consultant, Soberman, Isenbaum & Columby, accounting firm.	February, 1992
James Johnson Ph.D. (3),(4),(6) Highlands, North Carolina	Director	Partner, Kilpatrick, Stockton LLP, law firm.	December, 1997
Graeme McRae (2),(4),(6) Belleville, Ontario	President and Chief Executive Officer, Director	President and Chief Executive Officer of the Company.	June, 1979
Patrick Montpetit, CA Lorraine, Québec	Vice-President, Finance and Chief Financial Officer	Vice-President, Finance and Chief Financial Officer of the Company since August, 2000; previously served as Director of Finance, Administration, Commercial Agreements and Alliances with DSM Biologics Inc.	N/A

Name and Municipality of Residence	Position with the Company	Principal Occupation	Director of Company since
Dr. Nigel Phillips Pointe Claire, Québec	Senior Vice-President and Chief Scientific Officer	Senior Vice-President and Chief Scientific Officer of the Company since January, 1999; previously served as Associate Professor, Faculty of Pharmacy, University of Montreal.	N/A
Nicholas Photiades (2),(3),(6) Montréal, Québec	Director	Director, Business Development Bank of Canada	September 12, 2003
Dr. Dragan Rogan Belleville, Ontario	Vice President, Research and Development , Animal Health	Vice President, Research and Development, Animal Health since 1989.	N/A
The Hon. Lyle Vanclief (3),(6) Ameliasburg, Ontario	Director	Agricultural and Agri-Food Consultant; former Cabinet Minister (Agriculture and Agri-Food) and Member of Parliament, Government of Canada; former agricultural entrepreneur	September 20, 2005

Name and Municipality of Residence	Position with the Company	Principal Occupation	Director of Company since
Martin Warmelink Belleville, Ontario	President, Bioniche Food Safety and Vice-Chairman Bioniche Animal Health	President, Bioniche Food Safety Division as of July 2001 and President of Bioniche Animal Health division as of July, 2002; previously held senior marketing management positions with several major Canadian agricultural and pharmaceutical companies, Schering Plough, Ayerst (Ft. Dodge), Langford Labs and Cyanamid.	N/A

- (1) Member of the Audit Committee
- (2) Member of the Compensation Committee
- (3) Member of the Corporate Governance & Nominating Committee
- (4) Member of the Scientific Audit Committee
- (5) Member of the Risk Management Committee
- (6) Each Director has been elected to hold office until the date of the Company's next annual meeting of shareholders

The following are brief biographies of the Directors and Officers of the Company:

Dr. Stanley Alkemade received his veterinary degree from the University of Melbourne, Australia. He came to Canada in 1971 and ran a mixed veterinary practice in Seaforth, Ontario for the next ten years. He has lectured in the Animal Health Technology program at the Centralia College of Agricultural Technology. In 1986, he joined Vetrepharm Canada Inc. as Technical Director and was responsible for research and development, product registrations, corporate technical services and facilities design. He is now the President of BioMedEx, a project management firm for the pharmaceutical industry.

Dr. Michel Bazinet is Chairman and CEO of Replicor Inc. in Laval, Québec. He earned his medical degree at Sherbrooke University and completed his training in Urology at McGill University and did a fellowship in Uro-Oncology at the Memorial Sloan-Kettering Cancer Center in New York. He was Assistant Professor in Urology and Oncology at McGill, as well as Attending Urologist at the Royal Victoria Hospital, Montréal, General Hospital, and Jewish General Hospital. While at McGill, Dr. Bazinet served as Director of the Prostate Centre for four years. He founded Mediconsult Inc. in 1999 and served as Medical Director until 2000 when the company was acquired. Dr. Bazinet has been involved with Replicor Inc. since 2000.

Cindy Benning joined the Company in 1993 as Quality Control Supervisor. She was appointed to the position of Vice-President, Corporate Quality & Regulatory Affairs in December, 2001. In July of 2005 she took on additional responsibilities related to the Company's operations, with a new title of Vice-President of Operations, Quality & Regulatory Affairs. She has held various positions in Quality Control and/or Regulatory Affairs. Ms. Benning holds a Technology Diploma in Biological Sciences from St. Clair College and also graduated with a Bachelor of Science Degree from the University of Waterloo in 1998. With her extensive experience in GMP, cGMP & Quality Assurance as well as in Regulatory

Affairs for both human and veterinary health products in international regulatory markets, she is an important resource for the company's clinical development program and facility expansion plans.

Albert Beraldo currently serves as President and Chief Executive Officer of Bioniche Pharma. He has a Bachelor of Commerce degree from the University of Windsor and has a Chartered Accountant designation. He worked in public accounting with the accounting firm of Ernst & Whinney until he joined Vetrepharm Inc. as Financial Controller in 1983. Mr. Beraldo has held several positions within the group of companies which amalgamated to form the Company, and he played an integral role in the formation of Bioniche Inc., one of the amalgamating companies.

David Butts has Canadian degrees in pharmacy and law, and is a partner in the law firm, Hayhurst Robinson, based in Budapest with operations in Eastern Europe. Mr. Butts specializes in corporate and commercial law in the biotechnology and pharmaceutical industries. He has also acted as Corporate Counsel for Burroughs Wellcome in Canada.

Dr. François Charette was previously the General Manager and Senior Vice-President of Quintiles Canada Inc., leading its Canadian affiliate since 2003. Prior to this, he served as Vice-President of Scientific Affairs at Berlex Canada Inc., Director of Professional and Hospital Services at the Centre hospitalier Anna-Laberge, Director of Research at Bristol-Myers Squibb Inc., and Associate Director of Research at Hoehst Canada Inc. after spending 12 years in hospital practice. He earned his Medical Degree at the University of Montréal and his Master of Business Administration degree from Concordia University.

Margaret Cunningham has a Ph.D. in marketing from Texas A&M University and an MBA from the University of Calgary. She is Associate Professor of marketing at the School of Business, Queen's University since 1989.

Pierre-Yves Desbiens is Vice-President, Finance and Administration at Chronogen Inc. He holds a Bachelor's degree in Accounting from the University of Québec and an MBA from the Hautes Etudes Commerciales of the University of Montréal. Before joining Chronogen, Mr. Desbiens was Investment Portfolio Manager, Life Sciences, at the Fonds de solidarité des travailleurs du Québec, a venture capital institutional investor in the Canadian life sciences sector. Prior to this, he was Chief Financial Officer and General Manager of Horizon Sciences & Technologies Inc., a biopharmaceutical company based in Montréal. Before joining the health care sector, Mr. Desbiens held different positions in corporate finance with mid-size to multinational corporation, including Domtar Inc., Price Waterhouse, and Oceanix Inc.

Leslie Dunlop joined the Company in November, 2001 as Vice President, Corporate Counsel. Prior to joining the Company, she was in-house counsel at The Quaker Oats Company of Canada Limited, a position she held for eight years. Before going in-house, she worked for five years in a large law firm in Toronto.

Mohamed Elrafih joined the Company in 1984 and became Vice-President, Manufacturing Operations in November, 2001, responsible for all manufacturing and plant operations for the Company. Mohamed graduated from the University of Western Ontario with a Bachelor's Degree in Science (Microbiology). He has held positions of increasing responsibility in the manufacturing operations of the Company.

Gail Garland joined the Company in June, 2003 and currently serves as Vice-President, Business Development for the Company. She has a Bachelor of Science from Carleton University in Ottawa and an MBA from Rotman School of Management, University of Toronto. Ms. Garland has several years of progressive experience working for major pharmaceutical companies including Alcon, McNeil Pharmaceutical, Allen & Hanburys (Glaxo) and Johnson & Johnson where she was V-P, eBusiness and

Corporate Services. She has held senior roles in sales and marketing as well as administration and general management.

Hy Isenbaum is a Fellow Chartered Accountant and the founder of the firm Soberman, Isenbaum and Colomby. As the managing partner, a position he held until 1993, he built his firm to be the 15th largest accounting practice in Canada. He is a past Chairman of the Board of the Mount Sinai Hospital in Toronto. He was appointed by the Ontario Ministry of Health as Ombudsman to the Medical Review Committee of the College of Physicians and Surgeons. He currently serves on the Board of Directors of the Samuel Lumenfeld Research Institute in Toronto and was critical to the establishment of the Institute. Mr. Isenbaum is also a Governor of the Weizman Institute of Science in Israel and sits on the board of a number of private and public companies.

Dr. James Johnson has a doctorate in biochemistry in addition to his law degree and is a partner of Kilpatrick, Stockton LLP based in Atlanta, Georgia. He has extensive experience in chemical and biotechnology patent prosecution and licensing. He leads Kilpatrick, Stockton LLP's biomedical and chemical practice group.

Graeme McRae is the founder of both Vetrepharm Inc. and Bioniche Inc., two of the predecessor companies to the Company. Born in Australia, McRae has had a lengthy and diversified career in the pharmaceutical industry in both Australia and Canada. In 1971, Mr. McRae joined Pfizer Animal Health in Australia and held various sales and managerial positions with that company. Mr. McRae was transferred to Canada in 1975. In 1979, Mr. McRae founded Vetrepharm to focus on research and development in animal health, with an emphasis on developing non-antibiotic solutions for animal health problems. Bioniche Inc. was founded in 1992 by Mr. McRae to develop Vetrepharm's technologies for human health applications.

Patrick Montpetit joined the Company in August, 2000 as Vice-President, Finance and Chief Financial Officer. Mr. Montpetit is a Chartered Accountant with experience in the biopharmaceutical industry. Mr. Montpetit was formerly the Director of Finance, Administration, Commercial Agreements and Alliances with DSM Biologics Inc., a multinational pharmaceutical company based in Montréal and the Netherlands. Prior to joining the Company, he served as a consultant to a number of biotech companies.

Nicholas Photiades has been a Director, Life Sciences, Venture Capital Division of Business Development Bank of Canada for over seven years. He acts as a director of various corporations.

Dr. Nigel Phillips joined the Company in 1996. Dr. Phillips has an extensive research background in biochemistry, immunology, immunopharmacology and immunomodulatory drug formulation. Dr. Phillips has directed research programmes at the Strangeways Research Laboratory, Cambridge, the Institut Pasteur de Paris, McGill University, Montreal, the University of Montreal and the Institut Pasteur de Lille, in addition to receiving extensive pharmaceutical training and management experience within the pharmaceutical division of Reckitt & Colman. Dr. Phillips received his undergraduate degree at North East London Polytechnic in London, England and his Ph.D. from Queen Elizabeth College, University of London.

Dr. Dragan Rogan joined the Company in 1989. He received his Ph.D. in Virology and Cell-Mediated Immunity at the University of Belgrade, Yugoslavia after completing his Masters and Doctorate in Veterinary Medicine. Dr. Rogan was a University Professor of Microbiology and Immunology in Belgrade before becoming a Visiting Scientist at the Vaccine and Infectious Diseases Organization in Saskatoon, Saskatchewan in 1986. He obtained his Ph.D. and emigrated to Canada in 1989, when he joined the Company as Senior Scientist, went on to become Scientific Director, then Vice-President of Research & Development for the animal health operations of the Company. He leads a team of

researchers, with expertise in bacteriology; biochemistry; molecular biology; reproductive physiology; and virology.

The Honourable Lyle Vanclief is an agricultural and agri-food consultant. He served as a Member of Parliament for the Government of Canada from 1988 to 2004. Throughout his political career, Mr. Vanclief held several parliamentary appointments, his most recent as Minister of Agriculture and Agri-Food. Prior to serving in public office, Mr. Vanclief previously spent 25 years as an agricultural entrepreneur in his home community of Ameliasburg, Ontario (Prince Edward County).. He graduated with a Bachelor of Science degree in Agriculture from the University of Guelph in 1966.

Martin Warmelink is the President of the Company's Animal Health and Food Safety divisions. Mr. Warmelink joined the Company in June, 2001 and has over 20 years Canadian and International experience in animal health. He is a multi-lingual agricultural sales and marketing professional with comprehensive experience in creating new markets, optimizing merged sales forces and designing/implementing all aspects of the marketing and sales process. He has held senior marketing management positions with several of the major players in the Canadian agricultural and veterinary pharmaceutical industry including Schering Plough, Ayerst (Ft. Dodge), Langford Labs and Cyanamid.

Committees of the Board

There are five committees of the Board: the Audit Committee, the Compensation Committee, the Corporate Governance and Nominating Committee, the Scientific Audit Committee and the Risk Management Committee.

The members of the Audit Committee are Hy Isenbaum, Margaret Cunningham and Pierre-Yves Desbiens, all of whom are unrelated directors. The role of the Audit Committee is to review the interim financial statements with the Chief Financial Officer and the year-end financial statements with the Chief Financial Officer and the auditors of the Company prior to the presentation of such statements to the Board. The Audit Committee also oversees management reporting and internal controls.

The Compensation Committee is comprised of Hy Isenbaum, Nicholas Photiades and Michel Bazinet, all of whom are unrelated Directors, as well as Graeme McRae, a related Director, for all matters except his own compensation. This Committee reviews compensation decisions for executive and senior management staff, and is responsible for assessing Directors' compensation.

The Corporate Governance and Nominating Committee addresses the constitution and independence of the Board and the functions of the Board and its committees. This Committee consists of Lyle Vanclief, Hy Isenbaum and Nicholas Photiades, all or whom are unrelated Directors, together with the Company's Corporate Secretary and in-house Legal Counsel, Leslie Dunlop, as an *ex-officio* member. The Company's Corporate Disclosure committee, consisting of the President and Chief Executive Officer, Vice-President and Corporate Counsel, Chief Financial Officer and Manager of Corporate Communications and Investor Relations reports to this committee.

The Scientific Audit Committee oversees the strategic direction and integrity of the scientific development program. The Committee presently consists of Stanley Alkemade, James Johnson, Michel Bazinet and Graeme McRae.

The Risk Management Committee address areas of risk exposure and consists of David Butts and Stanley Alkemade, as well as Leslie Dunlop as an *ex-officio* member.

CONFLICTS OF INTEREST

While no conflicts of interest have arisen, the following circumstances could give rise to potential conflicts of interest.

Three of the Company's directors are related directors and their firms receive fees for services they provide to the Company. David Butts and Jim Johnson each provide legal services to the Company. Stanley Alkemade provides consulting services to the Company.

Two directors of the Company are indebted to the Company. Graeme McRae is Chief Executive Officer of the Company and a director and Albert Beraldo is Chief Executive Officer of Bioniche Pharma Group Limited and a director of the Company. In addition, an officer of Bioniche Pharma Group Limited, Damien Kelly, is indebted to the Company. Details of this indebtedness are disclosed in the Company's Information Circular of for its annual meeting of shareholders held on November 8 2004.

INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

On June 3, 2005 the Company entered into a ten year lease of a building located at 271 Labrosse Avenue from Renaissance (London) Investments Inc. ("Renaissance"). Renaissance acquired the building on that date and the purchase price was financed entirely by a mortgage loan. Renaissance is owned and controlled by Graeme McRae, the President and Chief Executive Officer and a director of the Company. The Company has the option to purchase the building by May 31, 2006 by assuming the balance of the mortgage loan outstanding by Renaissance.

The Company has decided to sell its interest in Bioniche Pharma Group Limited. Albert Beraldo, who is Chief Executive Officer of Bioniche Pharma Group Limited and a director of the Company, and Damien Kelly, who is an officer of Bioniche Pharma Group Limited, are shareholders of Bioniche Pharma Group Limited and have an interest in any such sale.

TRANSFER AGENT

The Company's transfer agent and registrar is CIBC Mellon and the Company's register is held in Toronto.

ADDITIONAL INFORMATION

A copy of the Company's financial statements and management discussion and analysis for the fiscal year ended June 30, 2005 may be obtained upon request from the Secretary of the Company and on SEDAR at www.sedar.com.

Additional information, including Directors' and Officers' remuneration and indebtedness, principal holders of the Company's securities, options to purchase securities and interests of insiders in material transactions, where applicable, is contained in the Company's information circular for its annual meeting of shareholders held on November 8 2004. Additional financial information is included in the Company's Annual Report of September 26, 2006.

When the Company's securities are in the course of a distribution pursuant to a prospectus or when a preliminary prospectus has been filed in respect of a distribution of the Company's securities, upon request to the Secretary, the Company will provide to any person:

1. One copy of this annual information form, together with one copy of any document, or the pertinent pages of any document, incorporated by reference in this annual information form;

2. One copy of the Company's audited consolidated financial statements contained in the Annual Report for the year ended June 30, 2005, together with the report of the auditors thereon, and one copy of the most recent of the Company's interim consolidated financial statements that have been filed subsequent to such audited financial statements;
3. One copy of the Company's information circular in respect of its most recent annual meeting of shareholders that involved the election of directors or one copy of any annual filing prepared instead of that information circular, as appropriate; and
4. One copy of any other documents that are incorporated by reference into the preliminary prospectus or short form prospectus and are not required to be provided under 1, 2 or 3 above.

At any other time, one copy of each of the documents referred to in 1, 2 and 3 above may be obtained upon request to the Secretary of the Company, provided that the Company may require payment of a reasonable charge if the request is made by a person who is not a shareholder of the Company.

Any request for any documents referred to above should be made to the Secretary, Attention: Legal Department, P.O. Box 1570, Belleville, Ontario, K8N 5J2, or by fax to (613) 966-4177.